

CalREDIE ELR
HL7 2.5.1
Implementation Guide Draft

California Department of Public Health

May 2011

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1. Introduction Comment

This HL7 2.5.1 Implementation Guide describes the requirements of the HL7 message format for Electronic Laboratory Reporting (ELR) to the state of California's Reportable Disease Information Exchange (CalREDIE) system.

This implementation guide is based off the *HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting To Public Health (US Realm), Release 1*, with changes specific to the CalREDIE implementation.

1.1 Purpose Comment

California Department of Public Health (CDPH) is providing this guide to communicate the necessary specifications for laboratories to transmit reportable results electronically.

2. Overview Comment

A successful implementation of a CalREDIE Electronic Lab Reporting (ELR) interface is dependent on the proper adoption of this HL7 ORU message profile.

This document is broken down into several sections. Section 3 describes the HL7 message type and supported segments which CalREDIE expects to receive for laboratory based reporting. Section 4 describes in detail the definition for each segment in the ORU message. Section 5 contains several example HL7 messages. Section 6 contains an appendix listing the important HL7 user defined tables used by many of the coded elements in the ORU message.

3. Conventions Comment

3.1 Object Identifier (OID) Comment

An OID is a globally unique ISO (International Organization for Standardization) identifier. HL7 represents OID's using a form consisting of numbers and dots (e.g. "2.16.840.1.113883"). OIDs are paths in a tree structure, with the left-most number representing the root and the right-most number representing a leaf.

OID's are used throughout this implementation guide as an identifier for key information objects.

HL7 is developing an implementation guide for the use of OIDs, "HL7 Implementation Guidance for Unique Object Identifiers (OIDs), Release 1". Additional information about OID's can be obtained at <http://www.hl7.org/oid/>.

3.2 Escape Sequences Comment

CalREDIE supports the following escape sequences for use in ST, TX, and FT data types.

- \F\ - Field separator
- \S\ - Component separator
- \T\ - Subcomponent separator
- \R\ - Repetition separator
- \E\ - Escape character

Additionally CalREDIE allows the escape sequence: 'begin new line' - \.br\ within NTE-3.

CalREDIE does not support the following escape sequences:

- \H\ - Start highlighting
- \N\ - Normal Text
- \.in #\ - Indent spaces
- \.ti #\ - Temporarily indent spaces
- \.sk #\ - Skip spaces
- \.ce\ - End current line and center next

3.3 Transport Mechanism: Comment

Each HL7 message should be sent to CalREDIE using PHIN MS as individual files with uniquely incrementing file names prefixed with CLIA number of the lab. The files should have the extension: *.OBX.

- Sending a batch of HL7 messages in a single file is not supported.

4. Unsolicited Observation Message (ORU) Comment

Laboratory information is reported through the ORU^R01 message to CalREDIE. The supported segments and usage for CalREDIE ORU^R01 message structure are described below.

Segment	Description	Cardinality	Additional Information
MSH	Message Header	[1..1]	Send only 1 per message
SFT	Software	[1..*]	Send at least one per message
{	<i>Begin Patient Result Group</i>	[1..1]	Send only 1 per message
{	<i>Begin Patient Group</i>	[1..1]	Send only 1 per message
PID	Patient Identification	[1..1]	Send only 1 per message
PD1	Additional Demographics	[0..1]	Optional
NTE	Notes and Comments	[0..*]	Optional
NK1	Next of Kin	[0..*]	Optional
{	<i>Begin Visit Group</i>	[0..1]	Optional
PV1	Patient Visit	[1..1]	Send only 1 per visit group
PV2	Patient Visit – Additional Info	[0..1]	Optional
}	<i>End Visit Group</i>		
}	<i>End Patient Group</i>		
{	<i>Begin Order Observation Group</i>	[1..*]	Send at least 1 per patient result group
ORC	Common Order	[0..1]	Send only 1 for the first order observation
NTE	Notes and Comments	[0..*]	Optional
OBR	Observation Request	[1..1]	Send only 1 per order observation
NTE	Notes and Comments	[0..*]	Optional
{	<i>Begin Timing/Quantity Group</i>	[0..*]	Optional
TQ1	Timing/Quantity	[1..1]	Send only 1 per timing/quantity group
TQ2	Timing Quantity Order Sequence	[0..1]	Optional
}	<i>End Timing/Quantity Group</i>		
CTD	Contact Data	[0..1]	Optional
{	<i>Begin Observation Group</i>	[1..*]	Send at least 1 per order observation
OBX	Observation/Result	[1..1]	Send only 1 per observation group
NTE	Notes and Comments	[0..*]	Optional
}	<i>End Observation Group</i>		
FT1	Financial Transaction	[0..*]	Optional
CTI	Clinical Transaction	[0..*]	Optional
{	<i>Begin Specimen Group</i>	[0..1]	Required for the parent order observation
SPM	Specimen	[1..1]	Send only 1 per specimen group
OBX	Observation/Result	[0..*]	Optional
}	<i>End Specimen Group</i>		
}	<i>End Order Observation Group</i>		
}	<i>End Patient Result Group</i>		
DSC	Continuation Pointer	[0..0]	Not Supported

The Segment Terminator denotes the end of each segment and will be represented by a carriage return (hex character '0D' or ASCII-013).

Some optional ORU^R01 segments are not described in this document including:

- PD1 – Additional Demographics
- PV1 – Patient Visit
- PV2 – Patient Visit Additional
- TQ1 – Timing / Quantity
- TQ2 – Timing / Quantity Order Sequence
- CTD – Contact Data
- FT1 – Financial Transaction
- CTI – Clinical Trial Identification
- DSC – Continuation Pointer

5. Segment Definitions

[Comment](#)

This section describes the definition for each HL7 segment used by CalREDIE. Each section contains a table listing the HL7 message elements communicated within the segment. The following columns describe the segment:

- ‘SEG’ – Indicates the segment type being described.
- ‘SEQ’ – Indicates the element sequence number.
 - [field #].[component #].[subcomponent #]
- ‘LEN’ – Indicates the minimum and maximum length for each element.
 - Example: 1..199 has a minimum length of 1 and maximum of 199.
- ‘DT’ – Indicates the data type expected for each element.
- ‘TBL#’ – Indicates the HL7 or user defined table used to populate the element.
- ‘ELEMENT NAME’ – Provides a name for the element.
- ‘USE’ – Indicates whether an individual element is:
 - ‘R’ – Required (Must always be populated)
 - ‘RE’ – Required, but can be empty
 - ‘C’ – Conditionally Required (Must be populated under certain conditions)
 - ‘CE’ – Conditionally Required, but can be empty
 - ‘O’ – Optional (May be populated, not used by CalREDIE)
 - ‘X’ – Not Used
- ‘EXAMPLE’ – Provides an example for the type of information populated in the element.

The HL7 fields in the tables alternate from white to yellow. Components and sub-components are the same color as the parent field. This is done to group all the components and sub-components of a single field together.

5.1 Message Header (MSH) Segment Comment

The MSH segment contains information describing how to parse and process the message. This includes identification of encoding characters, and message type. The MSH segment is also used to define the source, destination, and date/time the message was generated.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
MSH	1	1..1	ST		Field Separator	R	
MSH	2	4..4	ST		Encoding Characters	R	~~\&
MSH	3		HD		Sending Application	R	
MSH	3.1	1..20	IS		Sending Application Name	RE	Public Health App
MSH	3.2	1..199	ST		Sending Application ID	R	2.16.840.1.113883.19.3.2
MSH	3.3	1..6	ID		Sending Application ID Type	R	ISO
MSH	4		HD		Sending Facility	R	
MSH	4.1	1..20	IS		Sending Facility Name	RE	Public Health Lab
MSH	4.2	1..199	ST		Sending Facility ID	R	05D0909090
MSH	4.3	1..6	ID		Sending Facility ID Type	R	CLIA
MSH	5		HD		Receiving Application	R	
MSH	5.1	1..20	IS		Receiving Application Name	RE	CalREDIE
MSH	5.2	1..199	ST		Receiving Application ID	R	2.16.840.1.113883.3.33.4.2.2
MSH	5.3	1..6	ID		Receiving Application ID Type	R	ISO
MSH	6		HD		Receiving Facility	R	
MSH	6.1	1..20	IS		Receiving Facility Name	RE	CDPH
MSH	6.2	1..199	ST		Receiving Facility ID	R	2.16.840.1.113883.3.33.4.10.100
MSH	6.3	1..6	ID		Receiving Facility ID Type	R	ISO
MSH	7		TS		Date/Time Of Message	R	
MSH	7.1	8..14	DTM		Date/Time	R	201101011830
MSH	7.2		ID		Degree of Precision	X	
MSH	8	1..40	ST		Security	O	
MSH	9		MSG		Message Type	R	
MSH	9.1	3..3	ID	76	Message Code	R	ORU
MSH	9.2	3..3	ID	3	Trigger Event	R	R01
MSH	9.3	3..7	ID	354	Message Structure	R	ORU_R01
MSH	10	1..199	ST		Message Control ID	R	201101010001

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
MSH	11		PT		Processing ID (T,P,D)	R	
MSH	11.1	1..1	ID	103	Processing ID	R	P
MSH	11.2		ID	207	Processing Mode	O	
MSH	12		VID		Version ID	R	
MSH	12.1	3..5	ID	104	Version ID	R	2.5.1
MSH	12.2		CWE		Internationalization Code	O	
MSH	12.3		CWE		International Version ID	O	
MSH	13		NM		Sequence Number	O	
MSH	14		ST		Continuation Pointer	O	
MSH	15	2..2	ID	155	Accept Acknowledgement Type	CE	NE
MSH	16	2..2	ID	155	App Acknowledgement Type	CE	NE
MSH	17		ID		Country Code	O	
MSH	18		ID	211	Character Set	O	
MSH	19		CWE		Language of Message	O	
MSH	20		ID	356	Alt Char Set Handling Scheme	O	
MSH	21		EI		Message Profile Identifier	R	
MSH	21.1	1..199	ST		Entity Identifier	R	USELR1.0
MSH	21.2	1..20	IS		Namespace ID	RE	
MSH	21.3	1..199	ST		Universal ID	R	2.16.840.1.114222.4.10.3
MSH	21.4	1..6	ID		Universal ID Type	R	ISO

Example:

```
MSH|^~\&|Public Health App^2.16.840.1.113883.19.3.2^ISO|Public Health
Lab^05D0909090^CLIA|CalREDIE^2.16.840.1.113883.3.33.4.2.2^ISO|CDPH^2.16.840.1.113883.3.33.4.10.100^IS
O|201101011830||ORU^R01^ORU_R01|201101010001|P|2.5.1|||NE|NE|||||USELR1.0^2.16.840.1.114222.4.10.3^I
SO
```

Element Descriptions:

MSH-1 **Field Separator** – This character indicates the field separator for the rest of the message. The field separator separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment. The field separator always appears as the fourth character in the MSH segment.

- Always send '|' [ASCII (124)] in MSH-1.

MSH-2 **Encoding Characters** – This field always contains 4 distinct characters. The first character defines the component separator. The second character defines the sub-component separator. The third character defines the repetition character. The fourth character defines the escape character.

- Always send '^~\&' in MSH-2.
 - The caret '^' [ASCII(094)] defines the component separator (separates adjacent components)
 - The ampersand '&' [ASCII(038)] defines the sub-component separator (separates adjacent sub-components)
 - The tilde '~' [ASCII(126)] defines the repetition separator (separates multiple occurrences of an element)
 - The backslash '\' [ASCII(091)] defines the escape character (used to send encoding characters, other special characters and formatting commands within a data element)

MSH-3 **Sending Application** – Used to identify the sending application uniquely for messaging purposes.

MSH-3.1 **Sending Application Name** – The name or acronym for the sending application.

MSH-3.2 **Sending Application ID** – Must be an OID.

MSH-3.3 **Sending Application ID Type** – Always send 'ISO' in this component.

MSH-4 **Sending Facility** – Used to uniquely identify the facility that sends the message.

MSH-4.1 **Sending Facility Name** – The name or acronym for the sending facility.

MSH-4.2 **Sending Facility ID** – This is used by CalREDIE to identify the sending laboratory. This must be a valid CLIA number.

MSH-4.3 **Sending Facility ID Type** – Always send 'CLIA' in this component.

- MSH-5 **Receiving Application** – Used to identify the receiving application uniquely for messaging purposes.
- MSH-5.1 **Receiving Application Name** – Always send 'CalREDIE' in this component.
 - MSH-5.2 **Receiving Application ID** – Always send '2.16.840.1.113883.3.33.4.2.2' in this component.
 - MSH-5.3 **Receiving Application ID Type** – Always send 'ISO' in this component.
- MSH-6 **Receiving Facility** – Used to uniquely identify the facility that receives the message.
- MSH-6.1 **Receiving Facility Name** – Always send 'CDPH' in this component.
 - MSH-6.2 **Receiving Facility ID** – Always send '2.16.840.1.113883.3.33.4.10.100' in this component.
 - MSH-6.3 **Receiving Facility ID Type** – Always send 'ISO' in this component.
- MSH-7 **Date/Time Of Message** – This is the date/time the sending system created the message. Time stamp (TS) data type must be in the format:
- YYYYMMDD[HHMM[SS]]
- MSH-8 **Security** – Not used.
- MSH-9 **Message Type** – Defines the type of HL7 message being sent.
- MSH-9.1 **Message Code** – Always send 'ORU' in this component.
 - MSH-9.2 **Trigger Event** – Always send 'R01' in this component.
 - MSH-9.3 **Message Structure** – Always send 'ORU_R01' in this component.
- MSH-10 **Message Control ID** – A unique identifier for this HL7 message. The recommended format for this field is a timestamp plus sequence number.
- MSH-11 **Processing ID** – Used to indicate the intent for processing the message.
- For the CalREDIE production environment send 'P' in MSH-11.1.
 - For the CalREDIE test environment send 'T' in MSH-11.1.
 - Note these environments will require 2 separate transports.
- MSH-12 **Version ID** – HL7 version number used to interpret format and content of the message.
- Always send '2.5.1' in MSH-12.1.

MSH-13 Sequence number – Not used.

MSH-14 Continuation Pointer – Not used.

MSH-15 Accept Acknowledgement Type – See [HL7 table 155](#) for valid Acknowledgement Type codes.

- Always send 'NE' in this field.

MSH-16 Application Acknowledgement Type – See [HL7 table 155](#) for valid Acknowledgement Type codes.

- Always send 'NE' in this field.

MSH-17 Country Code – Not used.

MSH-18 Character Set – Not used.

MSH-19 Principal Language of Message – Not used.

MSH-20 Alternate Character Set Handling Scheme – Not used.

MSH-21 Message Profile Identifier – Used to reference or assert adherence to a message profile.

MSH-21.1 Entity Identifier – Always send 'USELR1.0' in this component.

MSH-21.2 Namespace ID – Not used.

MSH-21.3 Universal ID – Always send '2.16.840.1.114222.4.10.3' in this component.

MSH-21.4 Universal ID Type – Always send 'ISO' in this component.

5.2 Software (SFT) Segment Comment

This segment provides additional information about the software product(s) used as a Sending Application. The primary purpose of this segment is for diagnostic use.

The first repeat (i.e., the Laboratory Result Sender actor) is required. Any other application that transforms the message must add an SFT segment for that application. Other applications that route or act as a conduit may add an SFT but are not required to do so.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SFT	1		XON		Software Vendor Organization	R	
SFT	1.1	1..50	ST		Organization Name	CE	Atlas Development Corporation
SFT	1.2	1..20	IS	204	Organization Name Type Code	RE	L
SFT	1.3		NM		ID Number	X	
SFT	1.4		NM		Check Digit	O	
SFT	1.5		ID		Check Digit Scheme	O	
SFT	1.6		HD		Assigning Authority	CE	
SFT	1.6.1	1..20	IS		Namespace ID	RE	Health Level 7
SFT	1.6.2	1..199	ST		Universal ID	R	2.16.840.1.113883
SFT	1.6.3	1..6	ID		Universal ID Type	R	ISO
SFT	1.7	2..5	ID	203	Identifier Type Code	CE	XX
SFT	1.8		HD		Assigning Facility	O	
SFT	1.9		ID		Name Representation Code	O	
SFT	1.10	1..20	ST		Organization Identifier	RE	2.16.840.1.113883.3.33
SFT	2	1..15	ST		Software Certified Version or Release Number	R	10.5
SFT	3	1..20	ST		Software Product Name	R	CalREDIE
SFT	4	1..20	ST		Software Binary ID	R	56734
SFT	5		TX		Software Product Information	O	
SFT	6		TS		Software Install Date	RE	
SFT	6.1	8..14	DTM		Time	R	20110317
SFT	6.2		ID		Degree of Precision	X	

Example:

```
SFT|Atlas Development Corporation^L^^^Health Level
Seven&2.16.840.1.113883&ISO^XX^^2.16.840.1.113883.3.33|10.5|CalREDIE|56734||20110317
```

Element Descriptions:

SFT-1 **Software Vendor Organization** – Organization identification information for the software vendor that created this transaction.

SFT-1.1 **Organization Name** – The name of the organization.

SFT-1.2 **Organization Name Type Code** – See [HL7 Table 204](#) for valid Organization Name Type codes.

SFT-1.3 **ID Number** – Not used.

SFT-1.4 **Check Digit** – Not used.

SFT-1.5 **Check Digit Scheme** – Not used.

SFT-1.6 **Assigning Authority** – Used to identify the system, application, or organization that assigned the ID in SFT-1.10.

SFT-1.7 **Assigning Authority Name** – The name of the Assigning Authority.

SFT-1.8 **Assigning Authority ID** – The OID of the Assigning Authority.

SFT-1.9 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

SFT-1.10 **Identifier Type Code** – Always send 'XX' when SFT-1.10 is populated.

SFT-1.11 **Assigning Facility** – Not used.

SFT-1.12 **Name Representation Code** – Not used.

SFT-1.13 **Organization Identifier** – A code for the organization.

SFT-2 **Software Certified Version or Release Number** – Latest software version number of the sending system that has been compliance tested and accepted.

SFT-3 **Software Product Name** – The name of the software product that submitted the transaction.

SFT-4 **Software Binary ID** – Issued by a vendor for each unique software version instance to distinguish between like versions of the same software e.g., a checksum.

SFT-5 **Software Product Information** – Not used.

SFT-6 **Software Install Date** – Date the submitting software was installed at the sending site. Time stamp (TS) data type must be in the format:
YYYYMMDD[HHMM[SS]]

5.3 Patient Identification (PID) Segment Comment

This segment is the primary means of communicating demographics regarding the subject being tested. For CalREDIE, only one PID segment is expected and required per message.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	1	1..4	SI		Set ID - PID	R	1
PID	2		CX		Patient ID (External)	X	
PID	3		CX		Patient identifier list	R	
PID	3.1	1..15	ST		Patient ID	R	M0000010
PID	3.2		ST		Check Digit	O	
PID	3.3		ID	61	Check Scheme	O	
PID	3.4		HD		Assigning Authority	R	
PID	3.4.1	1..20	IS		Assigning Authority Name	RE	Public Health Clinic
PID	3.4.2	1..199	ST		Assigning Authority ID	R	2.16.840.1.113883.19.3.2.1
PID	3.4.3	1..6	ID		Assigning Authority ID Type	R	ISO
PID	3.5	2..5	ID	203	ID Type Code	R	MR
PID	3.6		HD		Assigning Facility	RE	
PID	3.6.1	1..20	IS		Assigning Facility Name	RE	Public Health Clinic of LA
PID	3.6.2	1..199	ST		Assigning Facility ID	R	2.16.840.1.113883.19.3.2.1
PID	3.6.3	1..6	ID		Assigning Facility ID Type Code	R	ISO
PID	3.7		TS		Effective Date	O	
PID	3.8		TS		Expiration Date	O	
PID	3.9		CWE		Assigning Jurisdiction	O	
PID	3.10		CWE		Assigning Agency or Department	O	
PID	4		CX		Alternate Patient ID - PID	X	
PID	5		XPN		Patient Name	R	
PID	5.1		FN		Patient Last Name	R	
PID	5.1.1	1..50	ST		Patient Last Name	R	Doe
PID	5.1.2		ST		Own Surname Prefix	O	
PID	5.1.3		ST		Own Surname Prefix	O	
PID	5.1.4		ST		Surname Prefix From Partner/Spouse	O	
PID	5.1.5		ST		Surname From Partner/Spouse	O	
PID	5.2	1..30	ST		Patient First Name	R	John

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	5.3	1..20	ST		Patient Middle Initial/Middle Name	RE	Q
PID	5.4	1..20	ST		Patient Name Suffix	RE	
PID	5.5	1..20	ST		Patient Name Prefix	RE	
PID	5.6	1..20	IS	360	Patient Degree	O	
PID	5.7	1..5	ID	200	Name Type Code	RE	L
PID	5.8		ID	4000	Name Representation Code	O	
PID	5.9		CE		Name Context	O	
PID	5.10		DR		Name Validity Range	X	
PID	5.11		ID		Name Assembly Order	O	
PID	5.12		TS		Effective Date	O	
PID	5.13		TS		Expiration Date	O	
PID	5.14	1..199	ST	360	Professional Suffix	RE	
PID	6		XPN		Mother's maiden name	RE	
PID	6.1		FN		Last name	RE	
PID	6.1.1	1..50	ST		Last name	R	
PID	6.1.2		ST		Own Surname Prefix	O	
PID	6.1.3		ST		Own Surname	O	
PID	6.1.4		ST		Surname Prefix From Partner/Spouse	O	
PID	6.1.5		ST		Surname From Partner/Spouse	O	
PID	6.2	1..30	ST		First name	RE	
PID	6.3	1..20	ST		Initial	RE	
PID	6.4	1..20	ST		Suffix	RE	
PID	6.5	1..20	ST		Prefix	RE	
PID	6.6	1..20	IS	360	Degree	O	
PID	6.7	1..5	ID	200	Name Type Code	RE	
PID	6.8		ID	4000	Name Representation Code	O	
PID	6.9		CE		Name Context	O	
PID	6.10		DR		Name Validity Range	X	
PID	6.11		ID		Name Assembly Order	O	
PID	6.12		TS		Effective Date	O	
PID	6.13		TS		Expiration Date	O	
PID	6.14	1..199	ST	360	Professional Suffix	RE	
PID	7		TS		Date/time of birth	RE	
PID	7.1	8..14	DTM		Time	R	19740814
PID	7.2		ID		Degree of Precision	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	8	1.20	IS	<u>1</u>	Sex	RE	M
PID	9		XPN		Patient Alias	X	
PID	10		CWE		Race	RE	
PID	10.1	1.20	ST	<u>5</u>	Race Category Code	RE	W
PID	10.2	1..199	ST		Race Description Text	CE	White
PID	10.3	1.12	ID		Coding System	CE	HL70005
PID	10.4	1.20	ST		Alternate Identifier	RE	
PID	10.5	1..199	ST		Alternate Text	CE	
PID	10.6	1.12	ID		Name of Alternate Coding System	CE	
PID	10.7	1.10	ST		Coding System Version ID	RE	2.5.1
PID	10.8	1.10	ST		Alternate Coding System Version ID	RE	
PID	10.9	1.10	ST		Original Text	CE	
PID	10.10		ST		Second Alternate Identifier	O	
PID	10.11		ST		Second Alternate Text	O	
PID	10.12		ID		Second Name of Alternate Coding System	O	
PID	10.13		ST		Second Alternate Coding System Version ID	O	
PID	10.14		ST		Coding System OID	O	
PID	10.15		ST		Value Set OID	X	
PID	10.16		DTM		Value Set Version ID	X	
PID	10.17		ST		Alternate Coding System OID	X	
PID	10.18		ST		Alternate Value Set OID	X	
PID	10.19		DTM		Alternate Value Set Version ID	X	
PID	10.20		ST		Second Alternate Coding System OID	X	
PID	10.21		ST		Second Alternate Value Set OID	X	
PID	10.22		DTM		Second Alternate Value Set Version ID	X	
PID	11		XAD		Patient Address	RE	
PID	11.1		SAD		Patient Street Address	RE	
PID	11.1.1	1..100	ST		Patient Street Address	R	1234 Anystreet Ave
PID	11.1.2		ST		Patient Street Name	O	
PID	11.1.3		ST		Patient Dwelling Number	O	
PID	11.2	1..100	ST		Patient Address Line 2	RE	Apt 101
PID	11.3	1..50	ST		City	RE	Anytown
PID	11.4	1..50	ST		State	RE	CA
PID	11.5	1..12	ST		ZIP/Postal Code	RE	90036

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	11.6	3..3	ID		Country	RE	
PID	11.7	1..3	ID	190	Address Type	RE	H
PID	11.8		ST		Other geog. Designation	O	
PID	11.9	1..20	IS		County	RE	
PID	11.10		IS		Census Tract	O	
PID	11.11		ID		Address Representation Code	O	
PID	11.12		DR		Address Validity Range	X	
PID	11.13		TS		Effective Date	O	
PID	11.14		TS		Expiration Date	O	
PID	12		IS	289	County Code	X	
PID	13		XTN		Phone Number - Home	RE	
PID	13.1		ST		Home Phone Number	X	
PID	13.2	3..3	ID	201	Telecom use code	RE	PRN
PID	13.3	2..8	ID	202	Telecom equipment type	RE	PH
PID	13.4	1..199	ST		Email Address	CE	John.Doe@test.com
PID	13.5	1..3	NM		Country Code	CE	1
PID	13.6	1..3	NM		Area Code	CE	805
PID	13.7	1..9	NM		Phone Number	CE	5551234
PID	13.8	1..5	NM		Extension	CE	
PID	13.9	1..20	ST		Any Text	RE	
PID	13.10		ST		Extension Prefix	X	
PID	13.11		ST		Speed Dial Code	X	
PID	13.12		ST		Unformatted Telephone Number	X	
PID	14		XTN		Phone Number - Business	RE	
PID	14.1		ST		Business Phone Number	X	
PID	14.2	3..3	ID	201	Telecom use code	RE	WPN
PID	14.3	2..8	ID	202	Telecom equipment type	RE	PH
PID	14.4	1..199	ST		Email Address	CE	
PID	14.5	1..3	NM		Country Code	CE	1
PID	14.6	1..3	NM		Area Code	CE	818
PID	14.7	1..9	NM		Phone Number	CE	5551234
PID	14.8	1..5	NM		Extension	CE	x1234
PID	14.9	1..20	ST		Any Text	RE	
PID	14.10		ST		Extension Prefix	X	
PID	14.11		ST		Speed Dial Code	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	14.12		ST		Unformatted Telephone Number	X	
PID	15		CWE	296	Primary Language	O	
PID	16		CWE	2	Marital Status	O	
PID	17		CWE	6	Religion	O	
PID	18		CX		Patient account number	O	
PID	19		ST		SSN number - patient	X	555-55-5555
PID	20		DLN		Driver's license Number - Patient	X	
PID	21		CX		Mother's Identifier	O	
PID	22		CWE		Ethnic Group	RE	
PID	22.1	1..20	ST	189	Identifier	RE	N
PID	22.2	1..199	ST		Text	CE	Not Hispanic or Latino
PID	22.3	1..12	ID		Name of coding system	CE	HL70189
PID	22.4	1..20	ST		Alternate Identifier	RE	
PID	22.5	1..199	ST		Alternate Text	CE	
PID	22.6	1..12	ID		Alternate Name of coding system	CE	
PID	22.7	1..10	ST		Coding System Version ID	RE	2.5.1
PID	22.8	1..10	ST		Alternate Coding System Version ID	RE	
PID	22.9	1..10	ST		Original Text	CE	
PID	22.10		ST		Second Alternate Identifier	O	
PID	22.11		ST		Second Alternate Text	O	
PID	22.12		ID		Second Name of Alternate Coding System	O	
PID	22.13		ST		Second Alternate Coding System Version ID	O	
PID	22.14		ST		Coding System OID	O	
PID	22.15		ST		Value Set OID	X	
PID	22.16		DTM		Value Set Version ID	X	
PID	22.17		ST		Alternate Coding System OID	X	
PID	22.18		ST		Alternate Value Set OID	X	
PID	22.19		DTM		Alternate Value Set Version ID	X	
PID	22.20		ST		Second Alternate Coding System OID	X	
PID	22.21		ST		Second Alternate Value Set OID	X	
PID	22.22		DTM		Second Alternate Value Set Version ID	X	
PID	23		ST		Birth Place	O	
PID	24		ID	136	Multiple birth indicator	O	
PID	25		NM		Birth Order	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	26		CWE	171	Citizenship	O	
PID	27		CWE	172	Veterans military status	O	
PID	28		CWE		Nationality	X	
PID	29		TS		Patient death date and time	RE	
PID	29.1	8..14	DTM		Time	R	
PID	29.2		ID		Degree of Precision	X	
PID	30	1..1	ID	136	Patient death indicator	RE	N
PID	31		ID	136	Identity Unknown Indicator	O	
PID	32		IS	445	Identity Reliability Code	O	
PID	33		TS		Last Update Date/Time	RE	
PID	33.1	8..14	DTM		Time	R	
PID	33.2		ID		Degree of Precision	X	
PID	34		HD		Last Update Facility	CE	
PID	34.1	1..20	IS		Namespace ID	RE	
PID	34.2	1..199	ST		Universal ID	R	
PID	34.3	1..6	ID		Universal ID Type	R	
PID	35		CWE		Species Code	RE	
PID	35.1	1..20	ST		Identifier	RE	
PID	35.2	1..199	ST		Text	CE	
PID	35.3	1..12	ID		Name of coding system	CE	
PID	35.4	1..20	ST		Alternate Identifier	RE	
PID	35.5	1..199	ST		Alternate Text	CE	
PID	35.6	1..12	ID		Alternate Name of coding system	CE	
PID	35.7	1..10	ST		Coding System Version ID	RE	
PID	35.8	1..10	ST		Alternate Coding System Version ID	RE	
PID	35.9	1..10	ST		Original Text	CE	
PID	35.10		ST		Second Alternate Identifier	O	
PID	35.11		ST		Second Alternate Text	O	
PID	35.12		ID		Second Name of Alternate Coding System	O	
PID	35.13		ST		Second Alternate Coding System Version ID	O	
PID	35.14		ST		Coding System OID	O	
PID	35.15		ST		Value Set OID	X	
PID	35.16		DTM		Value Set Version ID	X	
PID	35.17		ST		Alternate Coding System OID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
PID	35.18		ST		Alternate Value Set OID	X	
PID	35.19		DTM		Alternate Value Set Version ID	X	
PID	35.20		ST		Second Alternate Coding System OID	X	
PID	35.21		ST		Second Alternate Value Set OID	X	
PID	35.22		DTM		Second Alternate Value Set Version ID	X	
PID	36		CWE		Breed Code	O	
PID	37		ST		Strain	O	
PID	38		CWE	429	Production Class Code	O	
PID	39		CWE		Tribal Citizenship	O	

Example:

PID|1||M0000010^^^Public Health Clinic&2.16.840.1.113883.19.3.2.1&ISO ^MR^Public Health Clinic of
 LA&2.16.840.1.113883.19.3.2.1&ISO~44433333^^^US Social Security
 Administration&2.16.840.1.113883.4.1&ISO^SS||Doe^John^Q^^^^L||19740814|M||W^White^HL70005^^^^2.5.1|12
 34 Anystreet Ave^Apt
 101^Anytown^CA^90036^^H||^PRN^PH^John.Doe@test.com^1^805^5551234|^WPN^PH^^1^818^5551234^x1234|||||||
 N^Not Hispanic or Latino^HL70189^^^^2.5.1|||||||N

Element Descriptions:

PID-1 Set ID – PID – This field is set to '1' for the PID segment. CalREDIE expects exactly one PID segment per message.

- Always send '1' in PID-1.

PID-2 Patient ID (External) – Not used.

PID-3 Patient Identifier List – Field used to convey patient identifiers. CalREDIE expects the Medical Record Number of the sending facility as the first repeat in the patient identifier list. Any other identifiers should always appear after the medical record number in this field.

PID-3.1 Patient ID – The Patient ID combined with the Assigning Authority must uniquely identify the patient.

PID-3.2 Check Digit – Not used.

PID-3.3 Check Digit Scheme – Not used.

PID-3.4 Assigning Authority – Component used to identify the system, application, or organization that assigned the ID number in PID-3.1.

PID-3.4.1 **Assigning Authority Name** – The name of the Assigning Authority.

PID-3.4.2 **Assigning Authority ID** – The OID of the Assigning Authority.

PID-3.4.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

PID-3.5 ID Type Code – Defines the type of identifier sent in PID-3.1.

- Send 'MR' in PID-3.5 for Medical Record Numbers. Each patient obtaining services from a laboratory must have a unique identifier (Medical Record Number) for that patient. This identifier must never be reused. If the patient ID is ever recycled, consider prepending a date to the ID.
- Send 'SS' in PID-3.5 for Social Security Numbers.
- Send 'DL' in PID-3.5 for Driver License Numbers.
- Send 'AN' in PID-3.5 for Account Numbers.

PID-3.6 Assigning Facility – Component used to identify the place/location that the ID number was assigned for use.

PID-3.6.1 **Assigning Facility Name** – The name of the facility who assigned the patient identifier.

PID-3.6.2 **Assigning Facility ID** – The OID of the Assigning Facility.

PID-3.6.3 **Assigning Facility ID Type** – Always send 'ISO' in this sub-component.

PID-4 Alternate Patient ID – Not used.

PID-5 Patient Name – CalREDIE expects to receive only a single name in the patient name field. If your LIS contains more than one name for a single patient only send the legal name for the patient.

PID-5.1 **Last Name** – The patient's family/surname name. Send the last name only in PID-5.1.1. Do not send any other subcomponents of PID-5.1.

PID-5.2 **First Name** – The patient's given name.

PID-5.3 **Middle Initial/Middle Name** – The patient's middle initial or middle name.

PID-5.4 **Suffix** – The patient’s suffix (e.g. JR or III).

PID-5.5 **Prefix** – The patient’s prefix (e.g. DR).

PID-5.6 **Patient Degree** – Not used.

PID-5.7 **Name Type Code** – Defines the type of name sent in PID-5. See [HL7 table 200](#) for valid Name Type codes.

- Always send 'L' in PID-5.7

PID-5.8 **Name Representation Code** – Not used.

PID-5.9 **Name Context** – Not used.

PID-5.10 **Name Validity Range** – Not used.

PID-5.11 **Name Assembly Order** – Not used.

PID-5.12 **Effective Date** – Not used.

PID-5.13 **Expiration Date** – Not used.

PID-5.14 **Professional Suffix** – The patient’s professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

PID-6 **Mother’s Maiden Name** – The patient’s mother’s maiden name.

PID-6.1 **Last Name** – The patient’s mother’s maiden name. Send the last name only in PID-6.1.1. Do not send any other subcomponents of PID-6.1.

PID-6.2 **First Name** – The patient’s mother’s given name.

PID-6.3 **Middle Initial/Middle Name** – The patient’s mother’s middle initial or middle name.

PID-6.4 **Suffix** – The patient’s mother’s suffix (e.g. JR or III).

PID-6.5 **Prefix** – The patient’s mother’s prefix (e.g. DR).

PID-6.6 **Patient Degree** – Not used.

PID-6.7 **Name Type Code** – Defines the type of name sent in PID-6. See [HL7 table 200](#) for valid Name Type codes.

- Always send 'M' in PID-6.7

PID-6.8 **Name Representation Code** – Not used.

PID-6.9 **Name Context** – Not used.

PID-6.10 **Name Validity Range** – Not used.

PID-6.11 **Name Assembly Order** – Not used.

PID-6.12 **Effective Date** – Not used.

PID-6.13 **Expiration Date** – Not used.

PID-6.14 **Professional Suffix** – The patient's mother's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

PID-7 **Date/Time of Birth** – The patient's date of birth. CalREDIE expects at least 8 digits in this field. Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

PID-8 **Sex** – The patient's gender. See [HL7 table 1](#) for valid Gender codes.

PID-9 **Patient Alias** – Not used.

PID-10 **Race** – The patient's race.

PID-10.1 **Identifier** – See [HL7 table 5](#) for valid Race codes.

PID-10.2 **Text** – A textual description for the race identifier.

PID-10.3 **Name of Coding System** – Always send 'HL70005' in this component.

PID-10.4 **Alternate Identifier** – The Laboratory's internal race code.

PID-10.5 **Alternate Text** – The textual description for the alternate race ID.

PID-10.6 **Name of Alternate Coding System** – Always send 'L' in this component.

PID-10.7 **Coding System Version ID** – Always send '2.5.1' in this component.

PID-10.8 **Alternate Coding System Version ID** – The Laboratory's internal coding system version.

PID-10.9 **Original Text** – Not used.

PID-11 Patient Address – CalREDIE expects to receive only a single address in the patient address field. If your LIS contains more than one address for a single patient, only send the home address (when available).

PID-11.1 **Street Address** – The patient's street address. Send the street address only in PID-11.1.1. Do not send any other subcomponents of PID-11.1.

PID-11.2 **Address Line 2** – The patient's apartment/unit number.

PID-11.3 **City** – The city in which the patient resides.

PID-11.4 **State** – The state in which the patient resides. CalREDIE expects a valid 2 character state code.

PID-11.5 **ZIP/Postal Code** – The patient's zip code.

PID-11.6 **Country** – Not used.

PID-11.7 **Address Type** – Defines the type of address sent in PID-11. See [HL7 table 190](#) for valid Address Type codes. 'H' (Home) is recommended. If patient address is sent, this field is required.

PID-11.8 **Other Geographic Designation** – Not used.

PID-11.9 **County Parish Code** – Not used.

PID-12 County Code – Not used.

PID-13 Home Phone Number – The patient's home telephone number and email address. CalREDIE expects the phone number as the first repeat in this field, the email address should always be sent after the home phone number.

PID-13.1 **Home Phone Number** – Deprecated; see PID 3.5-3.9 for alternate location.

PID-13.2 **Telecom Use Code** – See [HL7 table 201](#) for valid Telecom Use codes.

- 'PRN' (Primary Residence Number) is required for the home telephone number.
- 'NET' (Network Address) is required for the patient's personal e-mail address.

PID-13.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- 'PH' (Telephone) is required for a patient's home telephone number.
- 'Internet' is required for a patient's personal e-mail address.

PID-13.4 **E-mail Address** – The patient's personal e-mail address.

PID-13.5 **Country Code** – Not used.

PID-13.6 **Area Code** – The area code of the patient's home telephone number. CalREDIE expects 3 digits in this field.

PID-13.7 **Phone Number** – The patient's local home telephone number. CalREDIE expects 7 digits in this field.

PID-13.8 **Extension** – The patient's home extension.

PID-13.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

PID-14 **Business Phone Number** – The patient's work/school telephone number. CalREDIE expects only a single phone number in this field.

PID-14.1 **Business Phone Number** – Deprecated.

PID-14.2 **Telecom Use Code** – See [HL7 table 201](#) for valid Telecom Use codes.

- Always send 'WPN' (Work Number) in this component.

PID-14.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

PID-14.4 **E-mail Address** – The patient's business e-mail address.

PID-14.5 **Country Code** – Not used.

PID-14.6 **Area Code** – The area code of the patient's work/school telephone number. CalREDIE expects 3 digits in this field.

PID-14.7 **Phone Number** – The patient's local work/school telephone number. CalREDIE expects 7 digits in this field.

PID-14.8 **Extension** – The patient's work/school extension.

PID-14.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

PID-15 **Primary Language** – Not used.

PID-16 **Marital Status** – Not used.

PID-17 **Religion** – Not used.

PID-18 **Patient Account Number** – Deprecated. Use PID-3 with 'AN' ID type code.

PID-19 **SSN Number** – Deprecated. Use PID-3 with 'SS' type code.

PID-20 **Driver's License Number** – Deprecated. Use PID-3 with 'DL' ID type code.

PID-21 **Mother's Identifier** – Not used.

PID-22 **Ethnic Group** – The Ethnicity of the Patient. See [HL7 table 189](#) for valid Ethnicity codes.

PID-23 **Birth Place** – Not used.

PID-24 **Multiple Birth Order** – Not used.

PID-25 **Birth Order** – Not used.

PID-26 **Citizenship** – Not used.

PID-27 **Veterans Military Status** – Not used.

PID-28 **Nationality** – Not used.

PID-29 **Patient Death Date and Time** – The date and time of the patient's death. CalREDIE expects at least 8 digits in this field. Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

PID-30 **Patient Death Indicator** – If PID-29 is populated, then send 'Y' in this field.

PID-31 **Identity Unknown Indicator** – Not used.

PID-32 **Identity Reliability Code** – Not used.

PID-33 **Last Update Date/Time** – Indicates when the demographics were last updated. CalREDIE expects at least 8 digits in this field. Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

PID-34 **Last Update Facility** – This is the facility that originated the demographics update.

PID-35 **Species Code** – Population of this field supports animal rabies testing as it relates to human rabies testing.

PID-35.1 **Identifier** – Use valid codes from the CDC value set: [PHVS_Animal_CDC](#).

PID-35.2 **Text** – A textual description for the species code.

PID-35.3 **Name of Coding System** – Always send 'SCT' in this component.

PID-35.4 **Alternate Identifier** – The Laboratory's internal species code.

PID-35.5 **Alternate Text** – The textual description for the alternate species code.

PID-35.6 **Name of Alternate Coding System** – Always send 'L' in this component.

PID-35.7 **Coding System Version ID** – Always send '2.5.1' in this component.

PID-35.8 **Alternate Coding System Version ID** – The Laboratory's internal coding system version.

PID-35.9 **Original Text** – Not used.

PID-36 **Breed Code** – Not used. Note: The value set for PID-35, PHVS_Animal_CDC, is drawn from SNOMED CT which is now structured such that the selection of the specific breed also implies a specific species. This makes PID-36 redundant.

PID-37 **Strain** – Not used.

PID-38 **Production Class** – Not used.

PID-39 **Tribal Citizenship** – Not used.

5.4 Next of Kin (NK1) Segment Comment

The next of kin (NK1) segment can be used to document the patient's next of kin, employer, guardian, etc. For CalREDIE, this segment is optional, and may repeat within a single message.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	1	1..4	SI		Set ID - NK1	R	1
NK1	2		XPN		Next of Kin/Emergency Contact Name	CE	
NK1	2.1		FN		Last Name	RE	
NK1	2.1.1	1..50	ST		Last Name	R	Doe
NK1	2.1.2		ST		Own Surname Prefix	O	
NK1	2.1.3		ST		Own Surname Prefix	O	
NK1	2.1.4		ST		Surname Prefix From Partner/Spouse	O	
NK1	2.1.5		ST		Surname From Partner/Spouse	O	
NK1	2.2	1..30	ST		First Name	RE	Jane
NK1	2.3	1..20	ST		Middle Initial/Middle Name	RE	R
NK1	2.4	1..20	ST		Suffix	RE	
NK1	2.5	1..20	ST		Prefix	RE	
NK1	2.6	1..20	IS	360	Degree	O	
NK1	2.7	1..5	ID	200	Name Type Code	RE	L
NK1	2.8		ID	4000	Name Representation Code	O	
NK1	2.9		CE		Name Context	O	
NK1	2.10		DR		Name Validity Range	X	
NK1	2.11		ID		Name Assembly Order	O	
NK1	2.12		TS		Effective Date	O	
NK1	2.13		TS		Expiration Date	O	
NK1	2.14	1..199	ST	360	Professional Suffix	RE	
NK1	3		CWE		Relationship	RE	
NK1	3.1	1..20	ST	63	Identifier	RE	SPO
NK1	3.2	1..199	ST		Text	CE	Spouse
NK1	3.3	1..12	ID		Name of coding system	CE	HL70063
NK1	3.4	1..20	ST		Alternate Identifier	RE	
NK1	3.5	1..199	ST		Alternate Text	CE	
NK1	3.6	1..12	ID		Alternate Name of coding system	CE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	3.7	1..10	ST		Coding System Version ID	RE	2.5.1
NK1	3.8	1..10	ST		Alternate Coding System Version ID	RE	
NK1	3.9	1..10	ST		Original Text	CE	
NK1	3.10		ST		Second Alternate Identifier	O	
NK1	3.11		ST		Second Alternate Text	O	
NK1	3.12		ID		Second Name of Alternate Coding System	O	
NK1	3.13		ST		Second Alternate Coding System Version ID	O	
NK1	3.14		ST		Coding System OID	O	
NK1	3.15		ST		Value Set OID	X	
NK1	3.16		DTM		Value Set Version ID	X	
NK1	3.17		ST		Alternate Coding System OID	X	
NK1	3.18		ST		Alternate Value Set OID	X	
NK1	3.19		DTM		Alternate Value Set Version ID	X	
NK1	3.20		ST		Second Alternate Coding System OID	X	
NK1	3.21		ST		Second Alternate Value Set OID	X	
NK1	3.22		DTM		Second Alternate Value Set Version ID	X	
NK1	4		XAD		Address	RE	
NK1	4.1		SAD		Street Address	RE	
NK1	4.1.1	1..120	ST		Street Address	R	1234 Anystreet Ave
NK1	4.1.2		ST		Street Name	O	
NK1	4.1.3		ST		Dwelling Number	O	
NK1	4.2	1..120	ST		Address Line 2	RE	Apt 101
NK1	4.3	1..50	ST		City	RE	Anytown
NK1	4.4	1..50	ST		State	RE	CA
NK1	4.5	1..12	ST		ZIP/Postal Code	RE	90036
NK1	4.6	3..3	ID		Country	RE	
NK1	4.7	1..3	ID	190	Address Type	RE	H
NK1	4.8		ST		Other geog. Designation	O	
NK1	4.9	1..20	IS		County	RE	
NK1	4.10		IS		Census Tract	O	
NK1	4.11		ID		Address Representation Code	O	
NK1	4.12		DR		Address Validity Range	X	
NK1	4.13		TS		Effective Date	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	4.14		TS		Expiration Date	O	
NK1	5		XTN		Phone number	RE	
NK1	5.1		ST		Telephone number	X	
NK1	5.2	3..3	ID	201	Telecom use code	RE	PRN
NK1	5.3	2..8	ID	202	Telecom equipment type	RE	PH
NK1	5.4	1..199	ST		Email Address	CE	Jane.Doe@test.com
NK1	5.5	1..3	NM		Country Code	CE	
NK1	5.6	1..3	NM		Area Code	CE	805
NK1	5.7	1..9	NM		Phone Number	CE	5551234
NK1	5.8	1..5	NM		Extension	CE	
NK1	5.9	1..20	ST		Any Text	RE	
NK1	5.10		ST		Extension Prefix	X	
NK1	5.11		ST		Speed Dial Code	X	
NK1	5.12		ST		Unformatted Telephone Number	X	
NK1	6		XTN		Business phone number	X	
NK1	7		CWE	131	Contact role	X	
NK1	8		DT	327/328	Start date	X	
NK1	9		DT		End date	X	
NK1	10		ST		Next of kin/AP job title	X	
NK1	11		JCC		Next of kin/AP job code/class	X	
NK1	12		CX		Next of kin/AP employee number	X	
NK1	13		XON		Organization name - NK1	CE	
NK1	13.1	1..50	ST		Organization Name	CE	
NK1	13.2	1..20	IS	204	Organization Name Type Code	RE	
NK1	13.3		NM		ID Number	X	
NK1	13.4		NM		Check Digit	O	
NK1	13.5		ID	61	Check Digit Scheme	O	
NK1	13.6		HD		Assigning Authority	CE	
NK1	13.6.1	1..20	IS		Assigning Authority Name	RE	
NK1	13.6.2	1..199	ST		Assigning Authority ID	R	
NK1	13.6.3	1..6	ID		Assigning Authority ID Type	R	
NK1	13.7	2..5	ID	203	Identifier Type Code	CE	
NK1	13.8		HD		Assigning Facility	O	
NK1	13.9		ID	465	Name Representation Code	O	
NK1	13.10	1..20	ST		Organization Identifier	RE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	14		CWE	2	Marital status	X	
NK1	15		IS	1	Sex	X	
NK1	16		TS		Date/time of birth	X	
NK1	17		IS	223	Living dependency	X	
NK1	18		IS	9	Ambulatory status	X	
NK1	19		CWE	171	Citizenship	X	
NK1	20		CWE	296	Primary language	O	
NK1	21		IS	220	Living arrangement	X	
NK1	22		CWE	215	Publicity code	X	
NK1	23		ID	136	Protection indicator	X	
NK1	24		IS	231	Student indicator	X	
NK1	25		CWE	6	Religion	X	
NK1	26		XPN		Mother's maiden name	X	
NK1	27		CWE	212	Nationality	X	
NK1	28		CWE	189	Ethnic group	X	
NK1	29		CWE	222	Contact reason	X	
NK1	30		XPN		Contact person's name	CE	
NK1	30.1		FN		Last Name	RE	
NK1	30.1.1	1..50	ST		Last Name	R	
NK1	30.1.2		ST		Own Surname Prefix	O	
NK1	30.1.3		ST		Own Surname Prefix	O	
NK1	30.1.4		ST		Surname Prefix From Partner/Spouse	O	
NK1	30.1.5		ST		Surname From Partner/Spouse	O	
NK1	30.2	1..30	ST		First Name	RE	
NK1	30.3	1..20	ST		Middle Initial/Middle Name	RE	
NK1	30.4	1..20	ST		Suffix	RE	
NK1	30.5	1..20	ST		Prefix	RE	
NK1	30.6	1..20	IS	<u>360</u>	Degree	O	
NK1	30.7	1..5	ID	<u>200</u>	Name Type Code	RE	
NK1	30.8		ID	4000	Name Representation Code	O	
NK1	30.9		CE		Name Context	O	
NK1	30.10		DR		Name Validity Range	X	
NK1	30.11		ID		Name Assembly Order	O	
NK1	30.12		TS		Effective Date	O	
NK1	30.13		TS		Expiration Date	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	30.14	1..199	ST	360	Professional Suffix	RE	
NK1	31		XTN		Contact person's telephone number	RE	
NK1	31.1		ST		Telephone Number	X	
NK1	31.2	3..3	ID	201	Telecom use code	RE	
NK1	31.3	2..8	ID	202	Telecom equipment type	RE	
NK1	31.4	1..199	ST		Email Address	CE	
NK1	31.5	1..3	NM		Country Code	CE	
NK1	31.6	1..3	NM		Area Code	CE	
NK1	31.7	1..9	NM		Phone Number	CE	
NK1	31.8	1..5	NM		Extension	CE	
NK1	31.9	1..20	ST		Any Text	RE	
NK1	31.10		ST		Extension Prefix	X	
NK1	31.11		ST		Speed Dial Code	X	
NK1	31.12		ST		Unformatted Telephone Number	X	
NK1	32		XAD		Contact person's address	RE	
NK1	32.1		SAD		Street Address	RE	
NK1	32.1.1	1..120	ST		Street Address	R	
NK1	32.1.2		ST		Street Name	O	
NK1	32.2.3		ST		Dwelling Number	O	
NK1	32.2	1..120	ST		Address Line 2	RE	
NK1	32.3	1..50	ST		City	RE	
NK1	32.4	1..50	ST		State	RE	
NK1	32.5	1..12	ST		ZIP/Postal Code	RE	
NK1	32.6	3..3	ID		Country	RE	
NK1	32.7	1..3	ID	190	Address Type	RE	
NK1	32.8		ST		Other geog. Designation	O	
NK1	32.9	1..20	IS		County	RE	
NK1	32.10		IS		Census Tract	O	
NK1	32.11		ID		Address Representation Code	O	
NK1	32.12		DR		Address Validity Range	X	
NK1	32.13		TS		Effective Date	O	
NK1	32.14		TS		Expiration Date	O	
NK1	33		CX		Next of kin/AP's identifiers	X	
NK1	34		IS	311	Job status	X	
NK1	35		CWE	5	Race	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NK1	36		IS	295	Handicap	X	
NK1	37		ST		Contact person SSN	X	
NK1	38		ST		Next of Kin Birth Place	X	
NK1	39		IS		VIP Indicator	X	

Example:

NK1|1|Doe^Jane^R^^^^L|SPO^Spouse^HL70063^^^^2.5.1|1234 Anystreet Ave^Apt
101^Anytown^CA^90036^^H|^PRN^PH^Jane.Doe@test.com^^805^5551234

Element Descriptions:

- NK1-1 **Set ID – NK1** – The first NK1 segment appearing in a message shall be populated with '1'. Subsequent NK1 segments will increment the Set ID field.
- NK1-2 **Next of Kin/Emergency Contact Name** – Name of the Next of Kin or Emergency Contact. CalREDIE expects only the legal name be sent in this field.
 - NK1-2.1 **Last Name** – The next of kin's surname. Send the last name only in NK1-2.1.1. Do not send any other subcomponents of NK1-2.1.
 - NK1-2.2 **First Name** – The next of kin's given name.
 - NK1-2.3 **Middle Name/Initial** – The next of kin's middle name or middle initial.
 - NK1-2.4 **Suffix** – The next of kin's suffix (e.g. Jr. or III).
 - NK1-2.5 **Prefix** – The next of kin's prefix (e.g. DR).
 - NK1-2.6 **Degree** – Not used.
 - NK1-2.7 **Name Type Code** – Defines the type of name sent in NK1-2. See [HL7 table 200](#) for valid Name Type codes.
 - Always send 'L' in NK1-2.7.
 - NK1-2.8 **Name Representation Code** – Not used.
 - NK1-2.9 **Name Context** – Not used.
 - NK1-2.10 **Name Validity Range** – Not used.
 - NK1-2.11 **Name Assembly Order** – Not used.

- NK1-2.12 **Effective Date** – Not used.
- NK1-2.13 **Expiration Date** – Not used.
- NK1-2.14 **Professional Suffix** – The next of kin's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.
- NK1-3 **Relationship** – The description of the relationship between the patient and the person identified in this segment.
- NK1-3.1 **Identifier** – See [HL7 table 63](#) for valid Relationship Type Codes.
 - NK1-3.2 **Text** – Description of the relationship.
 - NK1-3.3 **Name of Coding System** – Always send 'HL70063' in this component.
 - NK1-3.4 **Alternate Identifier** – The laboratory's internal identifier for the relationship.
 - NK1-3.5 **Alternate Text** – An alternate description of the relationship.
 - NK1-3.6 **Name of Alternate Coding System** – Always send 'L' in this component.
 - NK1-3.7 **Coding System Version ID** – Always send '2.5.1' in this component.
 - NK1-3.8 **Alternate Coding System Version ID** – The Laboratory's internal coding system version.
 - NK1-3.9 **Original Text** – Not used.
- NK1-4 **Next of Kin Address** – The next of kin's address. CalREDIE expects only the home address is sent in this field.
- NK1-4.1 **Street Address** – The next of kin's street/mailing address. Send the street address only in NK1-4.1.1. Do not send any other subcomponents of NK1-4.1.
 - NK1-4.2 **Address Line 2** – The next of kin's apartment/unit number
 - NK1-4.3 **City** – The next of kin's home city.
 - NK1-4.4 **State** – The next of kin's home state.
 - NK1-4.5 **Zip Code** – The next of kin's zip code.
 - NK1-4.6 **Country** – Not used.
 - NK1-4.7 **Address Type** – Defines the type of address sent in NK1-4. See [HL7 table 190](#) for valid Address Type codes. 'H' is recommended. If patient address is sent, this field is required.
 - NK1-4.8 **Other Geographic Designation** – Not used.

NK1-4.9 **County Parish Code** – Not used.

NK1-5 **Phone Number** – The next of kin's telephone number. CalREDIE expects only a single phone number in this field.

NK1-5.1 **Phone Number** – Deprecated.

NK1-5.2 **Telecom Use Code** – Identifies the type of phone number sent in NK1-5. See [HL7 table 201](#) for valid Telecom Use codes.

- Send 'PRN' (Primary Residence Number) in this component for the home phone number.
- Send 'WPN' (Work Number) in this component for the work phone number.

NK1-5.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

NK1-5.4 **E-mail Address** – The next of kin's personal e-mail address.

NK1-5.5 **Country Code** – Not used.

NK1-5.6 **Area Code** – The area code of the next of kin's home telephone number. CalREDIE expects 3 digits in this field.

NK1-5.7 **Phone Number** – The next of kin's local home telephone number. CalREDIE expects 7 digits in this field.

NK1-5.8 **Extension** – The next of kin's home extension.

NK1-5.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

NK1-6 **Business Phone Number** – Not used. Use NK1-5 instead.

NK1-7 **Contact Role** – Not used.

NK1-8 **Start Date** – Not used.

NK1-9 **End Date** – Not used.

NK1-10 **Next of Kin / Associated Parties Job Title** – Not used.

NK1-11 **Next of Kin / Associated Parties Job Code/Class** – Not used.

NK1-12 **Next of Kin / Associated parties Employee Number** – Not used.

NK1-13 Organization Name – NK1 – If next of kin or associated party is an organization use this field, otherwise, use field NK1-2.

NK1-13.1 **Organization Name** – The name of the organization.

NK1-13.2 **Organization Name Type Code** – See [HL7 table 204](#) for valid Organization Name Type codes.

NK1-13.3 **ID Number** – Not used.

NK1-13.4 **Check Digit** – Not used.

NK1-13.5 **Check Digit Scheme** – Not used.

NK1-13.6 **Assigning Authority** – Used to identify the system, application, or organization that assigned the ID in NK1-13.10.

NK1-13.6.1 **Assigning Authority Name** – The name of the Assigning Authority.

NK1-13.6.2 **Assigning Authority ID** – The OID of the Assigning Authority.

NK1-13.6.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

NK1-13.7 **Identifier Type Code** – Always send 'XX' when NK1-13.10 is populated.

NK1-13.8 **Assigning Facility** – Not used.

NK1-13.9 **Name Representation Code** – Not used.

NK1-13.10 **Organization Identifier** – A code for the organization.

NK1-14 Marital Status – Not used.

NK1-15 Administrative Sex – Not used.

NK1-16 Date / Time of Birth – Not used.

NK1-17 Living Dependency – Not used.

NK1-18 Ambulatory Status – Not used.

NK1-19 Citizenship – Not used.

NK1-20 Primary Language – Not used.

NK1-21 Living Arrangement – Not used.

NK1-22 **Publicity Code** – Not used.

NK1-23 **Protection Indicator** – Not used.

NK1-24 **Student Indicator** – Not used.

NK1-25 **Religion** – Not used.

NK1-26 **Mother's Maiden Name** – Not used.

NK1-27 **Nationality** – Not used.

NK1-28 **Ethnic Group** – Not used.

NK1-29 **Contact Reason** – Not used.

NK1-30 **Contact Person's Name** – The contact person within the organization specified in NK1-13. Required if NK1-13 is populated.

NK1-30.1 **Last Name** – The contact person's name. Send the last name only in NK1-30.1.1. Do not send any other subcomponents of NK1-30.1.

NK1-30.2 **First Name** – The contact person's given name.

NK1-30.3 **Middle Initial/Middle Name** – The contact person's middle initial or middle name.

NK1-30.4 **Suffix** – The contact person's suffix (e.g. JR or III).

NK1-30.5 **Prefix** – The contact person's prefix (e.g. DR).

NK1-30.6 **Patient Degree** – Not used.

NK1-30.7 **Name Type Code** – Defines the type of name sent in PID-6. See [HL7 table 200](#) for valid Name Type codes.

NK1-30.8 **Name Representation Code** – Not used.

NK1-30.9 **Name Context** – Not used.

NK1-30.10 **Name Validity Range** – Not used.

NK1-30.11 **Name Assembly Order** – Not used.

NK1-30.12 **Effective Date** – Not used.

NK1-30.13 **Expiration Date** – Not used.

NK1-30.14 **Professional Suffix** – The contact person's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

NK1-31 **Contact Person's Telephone Number** – The telephone number of the contact person listed in NK1-30.

NK1-31.1 **Telephone Number** – Deprecated.

NK1-31.2 **Telecom Use Code** – See [HL7 table 201](#) for valid Telecom Use codes.

- Always send 'WPN' (Work Number) in this component.

NK1-31.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

NK1-31.4 **E-mail Address** – The contact person's business e-mail address.

NK1-31.5 **Country Code** – Not used.

NK1-31.6 **Area Code** – The area code of the contact person's work telephone number. CalREDIE expects 3 digits in this field.

NK1-31.7 **Phone Number** – The contact person's local work telephone number. CalREDIE expects 7 digits in this field.

NK1-31.8 **Extension** – The contact person's work extension.

NK1-31.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

NK1-32 **Contact Person's Address** – The address of the contact person listed in NK1-30.

NK1-32.1 **Street Address** – The contact person's street address. Send the street address only in NK1-32.1.1. Do not send any other subcomponents of NK1-32.1.

NK1-32.2 **Address Line 2** – The contact person's apartment/unit number.

NK1-32.3 **City** – The city in which the contact person resides.

NK1-32.4 **State** – The state in which the contact person resides. CalREDIE expects a valid 2 character state code.

NK1-32.5 **ZIP/Postal Code** – The contact person's zip code.

NK1-32.6 **Country** – Not used.

NK1-32.7 **Address Type** – Defines the type of address sent in PID-11. See [HL7 table 190](#) for valid Address Type codes. 'B' (Business) is recommended. If contact person's address is sent, this field is required.

NK1-32.8 **Other Geographic Designation** – Not used.

NK1-32.9 **County Parish Code** – Not used.

NK1-33 **Next of Kin / Associated Part's Identifier** – Not used.

NK1-34 **Job Status** – Not used.

NK1-35 **Race** – Not used.

NK1-36 **Handicap** – Not used.

NK1-37 **Contact Person Social Security Number** – Not used.

NK1-38 **Next of Kin Birth Place** – Not used.

NK1-39 **VIP Indicator** – Not used.

5.5 Common Order (ORC) Segment Comment

The Common Order Segment (ORC) is used to transmit fields that are common to all orders (all types of services that are requested). Since the Ordering Provider address and the Ordering Facility information are required for a CalREDIE message, the ORC is a required segment.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
ORC	1	2..2	ID	119	Order Control	R	RE
ORC	2		EI		Placer Order Number	R	
ORC	2.1	1..199	ST		Entity Identifier	R	54654654
ORC	2.2	1..20	IS		Namespace ID	RE	Public Health Clinic
ORC	2.3	1..199	ST		Universal ID	R	2.16.840.1.113883.19.3.2.3
ORC	2.4	1..6	ID	301	Universal ID Type	R	ISO
ORC	3		EI		Filler Order Number	R	
ORC	3.1	1..199	ST		Entity Identifier	R	300005074
ORC	3.2	1..20	IS		Namespace ID	RE	Public Health Lab
ORC	3.3	1..199	ST		Universal ID	R	2.16.840.1.113883.19.3.1.6
ORC	3.4	1..6	ID	301	Universal ID Type	R	ISO
ORC	4		EI		Placer Group Number	RE	
ORC	4.1	1..199	ST		Entity Identifier	R	
ORC	4.2	1..20	IS		Namespace ID	RE	
ORC	4.3	1..199	ST		Universal ID	R	
ORC	4.4	1..6	ID	301	Universal ID Type	R	
ORC	5		ID	38	Order Status	O	
ORC	6		ID	121	Response Flag	O	
ORC	7		TQ		Quantity/Timing	X	
ORC	8		EIP		Parent	O	
ORC	9		TS		Date/Time of Transaction	O	
ORC	10		XCN		Entered By	O	
ORC	11		XCN		Verified By	O	
ORC	12		XCN		Ordering Provider	CE	
ORC	12.1	1..15	ST		Provider ID	RE	L43545
ORC	12.2		FN		Last Name	RE	
ORC	12.2.1	1..50	ST		Last Name	R	Craggie

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
ORC	12.2.2		ST		Own Surname Prefix	O	
ORC	12.2.3		ST		Own Surname	O	
ORC	12.2.4		ST		Surname Prefix From Partner/Spouse	O	
ORC	12.2.5		ST		Surname From Partner/Spouse	O	
ORC	12.3	1..30	ST		First Name	RE	Jessica
ORC	12.4	1..30	ST		Middle Name/Initial	RE	L
ORC	12.5	1..20	ST		Suffix	RE	
ORC	12.6	1..20	ST		Prefix	RE	
ORC	12.7		IS		Degree	O	
ORC	12.8		IS		Source Table	O	
ORC	12.9		HD		Assigning Authority	CE	
ORC	12.9.1	1..20	IS		Namespace ID	RE	CMS
ORC	12.9.2	1..199	ST		Universal ID	R	2.16.840.1.113883.19.4.6
ORC	12.9.3	1..6	ID		Universal ID Type	R	ISO
ORC	12.10	1..5	ID	200	Name Type Code	RE	L
ORC	12.11		ST		Identifier Check Digit	O	
ORC	12.12		ID		Check Digit Scheme	O	
ORC	12.13	2..5	ID		Identifier Type Code	CE	NPI
ORC	12.14		HD		Assigning Facility	RE	
ORC	12.14.1	1..20	IS		Namespace ID	RE	
ORC	12.14.2	1..199	ST		Universal ID	R	
ORC	12.14.3	1..6	ID		Universal ID Type	R	
ORC	12.15		ID		Name Representation Code	O	
ORC	12.16		CE		Name Context	O	
ORC	12.17		DR		Name Validity Range	X	
ORC	12.18		ID		Name Assembly Order	O	
ORC	12.19		TS		Effective Date	O	
ORC	12.20		TS		Expiration Date	O	
ORC	12.21	1..199	ST	360	Professional Suffix	RE	MD
ORC	12.22		CWE		Assigning Jurisdiction	O	
ORC	12.23		CWE		Assigning Agency or Department	O	
ORC	13		PL		Enterer's Location	O	
ORC	14		XTN		Call Back Phone Number	CE	
ORC	14.1		ST		Phone Number	X	
ORC	14.2	3..3	ID	201	Telecom use code	RE	WPN

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
ORC	14.3	2..8	ID	202	Telecom equipment type	RE	PH
ORC	14.4	1..199	ST		Email Address	CE	Jessica.Craggie@test.com
ORC	14.5	1..3	NM		Country Code	CE	1
ORC	14.6	1..3	NM		Area Code	CE	818
ORC	14.7	1..9	NM		Phone Number	CE	5553434
ORC	14.8	1..5	NM		Extension	CE	
ORC	14.9	1..20	ST		Any Text	RE	
ORC	14.10		ST		Extension Prefix	X	
ORC	14.11		ST		Speed Dial Code	X	
ORC	14.12		ST		Unformatted Telephone Number	X	
ORC	15		TS		Order Effective Date/Time	O	
ORC	16		CE		Order Control Code Reason	O	
ORC	17		CE		Entering Organization	O	
ORC	18		CE		Entering Device	O	
ORC	19		XCN		Action By	O	
ORC	20		CE		Advanced Beneficiary Notice Code	X	
ORC	21		XON		Ordering Facility Name	R	
ORC	21.1	1..50	ST		Organization Name	CE	Public Health Clinic
ORC	21.2	1..20	IS	204	Organization Name Type Code	RE	
ORC	21.3		NM		ID Number	X	
ORC	21.4		NM		Check Digit	O	
ORC	21.5		ID	61	Check Digit Scheme	O	
ORC	21.6		HD		Assigning Authority	CE	
ORC	21.6.1	1..20	IS		Assigning Authority Name	RE	
ORC	21.6.2	1..199	ST		Assigning Authority ID	R	
ORC	21.6.3	1..6	ID		Assigning Authority ID Type	R	
ORC	21.7	2..5	ID	203	Identifier Type Code	CE	
ORC	21.8		HD		Assigning Facility	O	
ORC	21.9		ID	465	Name Representation Code	O	
ORC	21.10	1..20	ST		Organization Identifier	RE	
ORC	22		XAD		Ordering Facility Address	R	
ORC	22.1		SAD		Facility Street Address	RE	
ORC	22.1.1	1..120	ST		Facility Street Address	R	555 East Elk
ORC	22.1.2		ST		Facility Street Name	O	
ORC	22.1.3		ST		Facility Dwelling Number	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
ORC	22.2	1..120	ST		Facility Address Line 2	RE	
ORC	22.3	1..50	ST		Facility City	RE	Calabasas
ORC	22.4	1..50	ST		Facility State	RE	CA
ORC	22.5	1..12	ST		Facility ZIP/Postal Code	RE	92123
ORC	22.6	3..3	ID		Country (Description)	RE	
ORC	22.7	1..3	ID	190	Address Type	RE	B
ORC	22.8		ST		Other geog. Designation	O	
ORC	22.9	1..20	IS		County	RE	Los Angeles
ORC	22.10		IS		Census tract	O	
ORC	22.11		ID		Address Representation Code	O	
ORC	22.12		DR		Address Validity Range	X	
ORC	22.13		TS		Effective Date	O	
ORC	22.14		TS		Expiration Date	O	
ORC	23		XTN		Ordering Facility Phone Number	R	
ORC	23.1		ST		Phone Number	X	
ORC	23.2	3..3	ID	201	Telecom use code	RE	WPN
ORC	23.3	2..8	ID	202	Telecom equipment type	RE	PH
ORC	23.4	1..199	ST		Email Address	CE	Public.Clinic@test.com
ORC	23.5	1..3	NM		Country Code	CE	1
ORC	23.6	1..3	NM		Area Code	CE	818
ORC	23.7	1..9	NM		Phone Number	CE	5551212
ORC	23.8	1..5	NM		Extension	CE	
ORC	23.9	1..20	ST		Any Text	RE	
ORC	23.10		ST		Extension Prefix	X	
ORC	23.11		ST		Speed Dial Code	X	
ORC	23.12		ST		Unformatted Telephone Number	X	
ORC	24		XAD		Ordering Provider Address	RE	
ORC	24.1		SAD		Ordering Provider Street Address	RE	
ORC	24.1.1	1..120	ST		Street Address	R	552 West Elk
ORC	24.1.2		ST		Street Name	O	
ORC	24.1.3		ST		Dwelling Number	O	
ORC	24.2	1..120	ST		Ordering Provider Other Designation	RE	Suite 123
ORC	24.3	1..50	ST		Ordering Provider City	RE	Calabasas
ORC	24.4	1..50	ST		Ordering Provider State	RE	CA
ORC	24.5	1..12	ST		Ordering Provider Zip or Postal Code	RE	92123

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
ORC	24.6	3..3	ID		Country (Description)	RE	
ORC	24.7	1..3	ID	190	Address Type	RE	B
ORC	24.8		ST		Other geog. Designation	O	
ORC	24.9	1..20	IS		County	RE	Los Angeles
ORC	24.10		IS		Census tract	O	
ORC	24.11		ID		Address Representation Code	O	
ORC	24.12		DR		Address Validity Range	X	
ORC	24.13		TS		Effective Date	O	
ORC	24.14		TS		Expiration Date	O	
ORC	25		CWE		Order Status Modifier	O	
ORC	26		CWE		Advanced Beneficiary Notice Override Reason	X	
ORC	27		TS		Filler's Expected Availability Date/Time	O	
ORC	28		CWE		Confidentiality Code	O	
ORC	29		CWE		Order Type	O	
ORC	30		CNE		Enterer Authorization Mode	O	
ORC	31		CWE		Parent Universal Service Identifier	O	

Example:

ORC|RE|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health Lab^2.16.840.1.113883.19.3.1.6^ISO|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO^L^^^NPI^^^^^^MD| |^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||Public Health Clinic|555 East Elk^^Calabasas^CA^92123^^B^^Los Angeles|^WPN^PH^Public.Clinic@test.com^1^818^5551212|552 West Elk^Suite 123^Calabasas^CA^92123^^B^^Los Angeles

Element Descriptions:

ORC-1 Order Control – Determines the function of the order segment.

- Always send 'RE' in this field.

ORC-2 Placer Order Number – The order number of the person or entity who placed the order. This field should contain the same value as OBR-2.

- ORC-2.1 **Order Number** - The placer order number is expected to be unique within the placer's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.
 - ORC-2.2 **Assigning Authority Name** – The name of the Assigning Authority.
 - ORC-2.3 **Assigning Authority ID** – The OID of the Assigning Authority.
 - ORC-2.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- ORC-3 **Filler Order Number** – The order number of the person or entity that carries out the order. This field should contain the same value as OBR-3.
- ORC-3.1 **Order Number** - The filler order number is expected to be unique within the filler's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.
 - ORC-3.2 **Assigning Authority Name** – The name of the Assigning Authority.
 - ORC-3.3 **Assigning Authority ID** – The OID of the Assigning Authority.
 - ORC-3.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- ORC-4 **Placer Group Number** – Used to identify a group of orders. In a laboratory setting, this is commonly referred to as a "requisition number".
- ORC-4.1 **Order Number** - The placer group order number is expected to be unique within the filler's organization. Order numbers which are reused should start with with a timestamp to guarantee uniqueness.
 - ORC-4.2 **Assigning Authority Name** – The name of the Assigning Authority.
 - ORC-4.3 **Assigning Authority ID** – The OID of the Assigning Authority.
 - ORC-4.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- ORC-5 **Order Status** – Not used.
- ORC-6 **Response Flag** – Not used.
- ORC-7 **Quantity/Timing** – Not used.
- ORC-8 **Parent** – Not used.

ORC-9 **Date/Time of Transaction** – Not used.

ORC-10 **Entered By** – Not used.

ORC-11 **Verified By** – Not used.

ORC-12 **Ordering Provider** – This field identifies the provider who ordered the test. If OBR-16 is populated, this field will contain the same value.

ORC-12.1 **ID number** – The identifier number for this provider. CalREDIE requires sending the National Provider Identifier (NPI).

ORC-12.2 **Last Name** – The ordering provider's family/surname. Send the last name only in ORC-12.2. Do not send any other subcomponents of ORC-12.2.

ORC-12.3 **First Name** – The ordering provider's given name.

ORC-12.4 **Middle Name/Initials** – The ordering provider's middle name or initials thereof.

ORC-12.5 **Suffix** – The ordering provider's suffix (e.g. Jr, Sr, III etc)

ORC-12.6 **Prefix** – The ordering provider's prefix (e.g. DR)

ORC-12.7 **Degree** – Not used.

ORC-12.8 **Source Table** – Not used.

ORC-12.9 **Assigning Authority** – The organization which assigned the ID number in ORC-12.1.

ORC-12.9.1 **Assigning Authority Name** – Always send 'CMS' in this subcomponent.

ORC-12.9.2 **Assigning Authority ID** – Always send '2.16.840.1.113883.19.4.6' in this subcomponent.

ORC-12.9.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

ORC-12.10 **Name Type Code** – See [HL7 table 200](#) for valid Name codes.

- 'L' is recommended.

ORC-12.11 **Identifier Check Digit** – Not used.

ORC-12.12 **Check Digit Scheme** – Not used.

ORC-12.13 Identifier Type Code – Always send 'NPI' in this field.

ORC-12.14 Assigning Facility - Component used to identify the place/location that the ID number was assigned for use.

ORC-12.14.1 Assigning Facility Name – The name of the Assigning Facility.

ORC-12.14.2 Assigning Facility ID – The OID of the Assigning Facility.

ORC-12.14.3 Assigning Facility ID Type – Always send 'ISO' in this sub-component.

ORC-12.15 Name Representation Code – Not used.

ORC-12.16 Name Context – Not used.

ORC-12.17 Name Validity Range – Not used.

ORC-12.18 Name Assembly Order – Not used.

ORC-12.19 Effective Date – Not used.

ORC-12.20 Expiration Date – Not used.

ORC-12.21 Professional Suffix – The ordering provider's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

ORC-12.22 Assigning Jurisdiction – Not used.

ORC-12.23 Assigning Agency or Department – Not used.

ORC-13 Enterer's Location – Not used.

ORC-14 Call Back Phone Number – This is the number the laboratory can call with questions regarding the order. This is the number associated with the placer of the order. Note: if OBR-17 is populated, this field will contain the same value.

ORC-14.1 Phone Number – Deprecated.

ORC-14.2 Telecom Use Code – See [HL7 table 201](#) for valid Telecom Use codes.

- Always send 'WPN' (Work Number) in this component.

ORC-14.3 Telecom Equipment Type – See HL7 table 202 for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

ORC-14.4 **E-mail Address** – The ordering provider's e-mail address.

ORC-14.5 **Country Code** – Not used.

ORC-14.6 **Area Code** – The area code of the ordering provider's telephone number. CalREDIE expects 3 digits in this field.

ORC-14.7 **Phone Number** – The ordering provider's local telephone number. CalREDIE expects 7 digits in this field.

ORC-14.8 **Extension** – The ordering provider's extension.

ORC-14.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

ORC-15 **Order Effective Date/Time** – Not used.

ORC-16 **Order Control Code Reason** – Not used.

ORC-17 **Entering Organization** – Not used.

ORC-18 **Entering Device** – Not used.

ORC-19 **Action By** – Not used.

ORC-20 **Advanced Beneficiary Notice Code** – Not used.

ORC-21 **Ordering Facility Name** – The name of the facility placing the order.

ORC-21.1 **Organization Name** – The name of the facility placing the order.

ORC-21.2 **Organization Name Type** – See [HL7 table 204](#) for valid Organization Name Type codes.

ORC-21.3 **ID Number** – Not used.

ORC-21.4 **Check Digit** – Not used.

ORC-21.5 **Check Digit Scheme ID** – Not used.

ORC-21.6 **Assigning Authority** – Used to identify the system, application, or organization that assigned the ID in ORC-21.10

ORC-21.6.1 **Assigning Authority Name** – The name of the Assigning Authority.

ORC-21.6.2 **Assigning Authority ID** – The OID of the Assigning Authority.

ORC-21.6.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

ORC-21.7 **Identifier Type Code** – Always send 'XX' when ORC-21.10 is populated.

ORC-21.8 **Assigning Facility ID** – Not used.

ORC-21.9 **Name Representation Code** – Not used.

ORC-21.10 **Organization Identifier** – The ordering facility identifier.

ORC-22 **Ordering Facility Address** – The address of the facility where the order was placed. CalREDIE expects only the business address for the ordering facility in ORC-22.

ORC-22.1 **Street Address** – The ordering facility's street/mailing address. Send the street address only in ORC-21.1.1. Do not send any other subcomponents of ORC-22.1.

ORC-22.2 **Address Line 2** – The ordering facility's suite/unit number.

ORC-22.3 **City** – The city where the ordering facility is located.

ORC-22.4 **State** – The state where the ordering facility is located. CalREDIE expects a valid 2 character state code.

ORC-22.5 **Zip Code** – The ordering facility's zip code.

ORC-22.6 **Country** – Not used.

ORC-22.7 **Address Type** – Defines the type of address sent in ORC-22. See [HL7 table 190](#) for valid Address Type codes. 'B' (Business) is recommended. If Ordering Facility Address is sent, then this component is required.

ORC-22.8 **Other Geographic Designation** – Not used.

ORC-22.9 **County** – The county where the ordering facility is located.

ORC-23 **Ordering Facility Phone Number** – The ordering facility's phone number. CalREDIE expects only a single phone number in this field.

ORC-23.1 **Phone Number** – Deprecated.

ORC-23.2 **Telecom Use Code** – See [HL7 table 201](#) for valid Telecom Use codes.

- Always send 'WPN' (Work Number) in this component.

ORC-23.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

ORC-23.4 **E-mail Address** – The ordering facility's e-mail address.

ORC-23.5 **Country Code** – Not used.

ORC-23.6 **Area Code** – The area code of the ordering facility's phone number. CalREDIE expects 3 digits in this field.

ORC-23.7 **Phone Number** – The ordering facility's local telephone number. CalREDIE expects 7 digits in this field.

ORC-23.8 **Extension** – The extension for the ordering facility.

ORC-23.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

ORC-24 **Ordering Provider Address** – The address of the ordering provider. CalREDIE expects only the business address for the ordering provider in ORC-24.

ORC-24.1 **Street Address** – The ordering provider's street/mailing address. Send the street address only in ORC-24.1.1. Do not send any other subcomponents of ORC-24.1.

ORC-24.2 **Address Line 2** – The ordering provider's suite/unit number.

ORC-24.3 **City** – The ordering provider's city.

ORC-24.4 **State** – The ordering provider's state.

ORC-24.5 **Zip or Postal Code** – The ordering provider's zip code.

ORC-24.6 **Country** – Not used.

ORC-24.7 **Address Type** – Defines the type of address sent in ORC-24. See [HL7 table 190](#) for valid Address Type codes. 'B' (Business) is recommended. If ordering provider address is sent, this component is required.

ORC-24.8 **Other Geographic Designation** – Not used.

ORC-24.9 **County** – The ordering provider's county.

5.6 Observation Request (OBR) Segment Comment

The OBR segment is used to capture information about one test being performed on the specimen. Most importantly, the OBR identifies the type of testing to be performed on the specimen, and ties that information to the order for the testing. For CalREDIE messaging, at least one OBR segment is required, and may repeat within a single message.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	1	1..4	SI		Set ID – OBR	R	1
OBR	2		EI		Placer Order Number	RE	
OBR	2.1	1..199	ST		Entity Identifier	R	54654654
OBR	2.2	1..20	IS		Namespace ID	RE	Public Health Clinic
OBR	2.3	1..199	ST		Universal ID	R	2.16.840.1.113883.19.3.2.3
OBR	2.4	1..6	ID		Universal ID Type	R	ISO
OBR	3		EI		Filler Order Number	R	
OBR	3.1	1..199	ST		Entity Identifier	R	300005074
OBR	3.2	1..20	IS		Namespace ID	RE	Public Health Lab
OBR	3.3	1..199	ST		Universal ID	R	2.16.840.1.113883.19.3.1.6
OBR	3.4	1..6	ID		Universal ID Type	R	ISO
OBR	4		CWE		Universal Service ID	R	
OBR	4.1	1..20	ST		Code (LOINC)	RE	50545-3
OBR	4.2	1..199	ST		Description (LOINC)	CE	Bacterial susceptibility panel:-:Pt:Isolate:OrdQn:MIC
OBR	4.3	1..12	ST		ID Type (LOINC)	CE	LN
OBR	4.4	1..20	ST		Code (Local)	RE	MIC
OBR	4.5	1..199	ST		Description (Local)	CE	Susceptibility Panel
OBR	4.6	1..12	ST		ID Type (Local)	CE	L
OBR	4.7	1..10	ST		Coding System Version ID	RE	2.26
OBR	4.8	1..10	ST		Alternate Coding System Version ID	RE	
OBR	4.9	1..10	ST		Original Text	CE	
OBR	4.10		ST		Second Alternate Identifier	O	
OBR	4.11		ST		Second Alternate Text	O	
OBR	4.12		ID		Second Name of Alternate Coding System	O	
OBR	4.13		ST		Second Alternate Coding System Version ID	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	4.14		ST		Coding System OID	O	
OBR	4.15		ST		Value Set OID	X	
OBR	4.16		DTM		Value Set Version ID	X	
OBR	4.17		ST		Alternate Coding System OID	X	
OBR	4.18		ST		Alternate Value Set OID	X	
OBR	4.19		DTM		Alternate Value Set Version ID	X	
OBR	4.20		ST		Second Alternate Coding System OID	X	
OBR	4.21		ST		Second Alternate Value Set OID	X	
OBR	4.22		DTM		Second Alternate Value Set Version ID	X	
OBR	5		ID		Priority	X	
OBR	6		TS		Requested Date/Time	X	
OBR	7		TS		Observation Date/Time	R	
OBR	7.1	8..14	DTM		Time	R	200808151030
OBR	7.2		ID		Degree of Precision	X	
OBR	8		TS		Observation End Date/Time	CE	
OBR	8.1	8..14	DTM		Time	R	
OBR	8.2		ID		Degree of Precision	X	
OBR	9		CQ		Collection Volume	X	
OBR	10		XCN		Collector Identifier	O	
OBR	11		ID	65	Specimen Action Code	O	
OBR	12		CWE		Danger Code	O	
OBR	13		ST		Relevant Clinical Info.	RE	
OBR	14		TS		Specimen Received Date/Time	X	
OBR	15		SPS	70	Specimen Source	X	
OBR	16		XCN		Ordering Provider	RE	
OBR	16.1	1..15	ST		ID number	RE	L43545
OBR	16.2		ST		Last Name	RE	
OBR	16.2.1	1..50	ST		Last Name	R	Craggie
OBR	16.2.2		ST		Own Surname Prefix	O	
OBR	16.2.3		ST		Own Surname	O	
OBR	16.2.4		ST		Surname Prefix From Partner/Spouse	O	
OBR	16.2.5		ST		Surname From Partner/Spouse	O	
OBR	16.3	1..30	ST		First Name	RE	Jessica
OBR	16.4	1..30	ST		Initials	RE	L
OBR	16.5	1..20	ST		Suffix	RE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	16.6	1..20	ST		Prefix	RE	
OBR	16.7		IS	360	Degree	O	
OBR	16.8		IS	297	Source table	O	
OBR	16.9		HD		Assigning Authority	CE	
OBR	16.9.1	1..20	IS		Namespace ID	RE	CMS
OBR	16.9.2	1..199	ST		universal ID	R	2.16.840.1.113883.19.4.6
OBR	16.9.3	1..6	ID		universal ID type	R	ISO
OBR	16.10	1..5	ID	200	Name type code	RE	L
OBR	16.11		ST		identifier check digit	O	
OBR	16.12		ID		Check digit code	O	
OBR	16.13	2..5	IS	203	Identifier type code	CE	NPI
OBR	16.14		HD		Assigning facility	RE	
OBR	16.14.1	1..20	IS		Namespace ID	RE	
OBR	16.14.2	1..199	ST		universal ID	R	
OBR	16.14.3	1..6	ID		universal ID type	R	
OBR	16.15		ID	4000	Name representation code	O	
OBR	16.16		CE		Name Context	O	
OBR	16.17		DR		Name Validity Range	X	
OBR	16.18		ID		Name Assembly Order	O	
OBR	16.19		TS		Effective Date	O	
OBR	16.20		TS		Expiration Date	O	
OBR	16.21	1..199	ST		Professional Suffix	RE	MD
OBR	16.22		CWE		Assigning Jurisdiction	O	
OBR	16.23		CWE		Assigning Agency or Department	O	
OBR	17		XTN		Order Callback Phone Number	RE	
OBR	17.1		ST		Phone Number	X	
OBR	17.2	3..3	ID	201	Telecom Use Code	RE	WPN
OBR	17.3	2..8	ID	202	Telecom Equipment Type	RE	PH
OBR	17.4	1..199	ST		Email Address	CE	Jessica.Craggie@test.com
OBR	17.5	1..3	NM		Country Code	CE	1
OBR	17.6	1..3	NM		Area Code	CE	818
OBR	17.7	1..9	NM		Phone Number	CE	5553434
OBR	17.8	1..5	NM		Extension	CE	
OBR	17.9	1..20	ST		Any Text	RE	
OBR	17.10		ST		Extension Prefix	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	17.11		ST		Speed Dial Code	X	
OBR	17.12		ST		Unformatted Telephone Number	X	
OBR	18		ST		Placer Field 1	O	
OBR	19		ST		Placer Field 2	O	
OBR	20		ST		Filler Field 1	O	
OBR	21		ST		Filler Field 2	O	
OBR	22		TS		Results Rpt/Status Change - Date/Time	R	
OBR	22.1	8..14	DTM		Time	R	2008081830
OBR	22.2		ID		Degree of Precision	X	
OBR	23		MOC		Charge to Practice	O	
OBR	24		ID	74	Diagnostic Serv Sect ID	O	
OBR	25	1..1	ID	123	Result Status	R	F
OBR	26		PRL		Parent	CE	
OBR	26.1		CWE		OBX - 3 Observation Identifier	R	
OBR	26.1.1	1..20	ST		Code (LOINC)	RE	625-4
OBR	26.1.2	1..199	ST		Description (LOINC)	CE	Bacteria identified:Prid:Pt:Stool:Nom:Culture
OBR	26.1.3	1..12	ST		ID Type (LOINC)	CE	LN
OBR	26.1.4	1..20	ST		Code (Local)	RE	
OBR	26.1.5	1..199	ST		Description (Local)	CE	
OBR	26.1.6	1..12	ST		ID Type (Local)	CE	
OBR	26.1.7	1..10	ST		Coding System Version ID	RE	
OBR	26.1.8	1..10	ST		Alternate Coding System Version ID	RE	
OBR	26.1.9	1..10	ST		Original Text	CE	
OBR	26.1.10		ST		Second Alternate Identifier	O	
OBR	26.1.11		ST		Second Alternate Text	O	
OBR	26.1.12		ID		Second Name of Alternate Coding System	O	
OBR	26.1.13		ST		Second Alternate Coding System Version ID	O	
OBR	26.1.14		ST		Coding System OID	O	
OBR	26.1.15		ST		Value Set OID	X	
OBR	26.1.16		DTM		Value Set Version ID	X	
OBR	26.1.17		ST		Alternate Coding System OID	X	
OBR	26.1.18		ST		Alternate Value Set OID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	26.1.19		DTM		Alternate Value Set Version ID	X	
OBR	26.1.20		ST		Second Alternate Coding System OID	X	
OBR	26.1.21		ST		Second Alternate Value Set OID	X	
OBR	26.1.22		DTM		Second Alternate Value Set Version ID	X	
OBR	26.2	1..20	ST		OBX-4 sub-id of parent result	RE	1
OBR	26.3		TX		OBX-5 Organism Name	RE	Campylobacter jejuni
OBR	27		TQ		Quantity/Timing	X	
OBR	28		XCN		Result Copies To	O	
OBR	29		EIP		Parent	CE	
OBR	29.1		EI		Placer Order Number (from OBR-2)	O	
OBR	29.2		EI		Filler Order Number (from OBR-3)	R	
OBR	29.2.1	1..199	ST		Entity Identifier	R	
OBR	29.2.2	1..20	IS		Namespace ID	RE	
OBR	29.2.3	1..199	ST		Universal ID	R	
OBR	29.2.4	1..6	ID		Universal ID Type	R	
OBR	30		ID	124	Transportation Mode	X	
OBR	31		CWE		Reason for Study	RE	
OBR	31.1	1..20	ST		Identifier	RE	
OBR	31.2	1..199	ST		Text	CE	
OBR	31.3	1..12	ST		Name of Coding System	CE	
OBR	31.4	1..20	ST		Alternate Identifier	RE	
OBR	31.5	1..199	ST		Alternate Text	CE	
OBR	31.6	1..12	ST		Alternate Coding System	CE	
OBR	31.7	1..10	ST		Coding System Version ID	RE	
OBR	31.8	1..10	ST		Alternate Coding System Version ID	RE	
OBR	31.9	1..10	ST		Original Text	CE	
OBR	31.10		ST		Second Alternate Identifier	O	
OBR	31.11		ST		Second Alternate Text	O	
OBR	31.12		ID		Second Name of Alternate Coding System	O	
OBR	31.13		ST		Second Alternate Coding System Version ID	O	
OBR	31.14		ST		Coding System OID	O	
OBR	31.15		ST		Value Set OID	X	
OBR	31.16		DTM		Value Set Version ID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	31.17		ST		Alternate Coding System OID	X	
OBR	31.18		ST		Alternate Value Set OID	X	
OBR	31.19		DTM		Alternate Value Set Version ID	X	
OBR	31.20		ST		Second Alternate Coding System OID	X	
OBR	31.21		ST		Second Alternate Value Set OID	X	
OBR	31.22		DTM		Second Alternate Value Set Version ID	X	
OBR	32		NDL		Principal Result Interpreter	RE	
OBR	32.1		CNN		Name Component Only	R	
OBR	32.1.1	1..15	ST		ID	RE	
OBR	32.1.2	1..50	ST		Last Name	RE	
OBR	32.1.3	1..30	ST		First Name	RE	
OBR	32.1.4	1..30	ST		Middle Initial	RE	
OBR	32.1.5	1..20	ST		Suffix	RE	
OBR	32.1.6	1..20	ST		Prefix	RE	
OBR	32.1.7	1..5	IS		Degree	RE	
OBR	32.1.8		IS		Name Type Code	X	
OBR	32.1.9	1..20	IS		Assigning Authority – Namespace ID	RE	
OBR	32.1.10	1..199	ST		Assigning Authority – Universal ID	CE	
OBR	32.1.11	1..6	ID		Assigning Authority – Universal ID Type	CE	
OBR	32.2		TS		Start Date/time	X	
OBR	32.3		TS		End Date/time	X	
OBR	32.4		IS	302	Point of Care	X	
OBR	32.5		IS	303	Room	X	
OBR	32.6		IS	304	Bed	X	
OBR	32.7		HD		Facility	X	
OBR	32.8		IS	306	Location Status	X	
OBR	32.9		IS	305	Patient Location Type	X	
OBR	32.10		IS	307	Building	X	
OBR	32.11		IS	308	Floor	X	
OBR	33		NDL		Assistant Result Interpreter	O	
OBR	34		NDL		Technician	O	
OBR	35		NDL		Transcriptionist	O	
OBR	36		TS		Scheduled Date/Time	O	
OBR	37		NM		Number of Sample Containers	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBR	38		CWE		Transport Logistics of Collected Sample	X	
OBR	39		CWE		Collector's Comment	O	
OBR	40		CWE		Transport Arrangement Responsibility	X	
OBR	41		ID	224	Transport Arranged	X	
OBR	42		ID	225	Escort Required	X	
OBR	43		CWE		Planned Patient Transport Comment	X	
OBR	44		CWE	88	Procedure Code	O	
OBR	45		CWE	340	Procedure Code Modifier	O	
OBR	46		CWE		Placer Supplemental Service Information	O	
OBR	47		CWE		Filler Supplemental Service Information	O	
OBR	48		CWE		Medically Necessary Duplicate Procedure Reason	O	
OBR	49		IS		Result Handling	O	
OBR	50		CWE		Parent Universal Service Identifier	O	

Example:

```

OBR|1|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|50545-3^Bacterial susceptibility panel:-
:Pt:Isolate:OrdQn:MIC^LN^MIC^Susceptibility
Panel^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO^L
^^^NPI^^^^^MD|^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F|625-4&Bacteria
identified:Prid:Pt:Stool:Nom:Culture&LN^1^Campylobacter jejuni

```

Element Descriptions:

- OBR-1 Set ID – OBR** – The first OBR segment appearing in a message shall be populated with '1'. Subsequent OBR segments will increment the Set ID field.
- OBR-2 Placer Order Number** – The order number of the person or entity who placed the order. The placer order number is expected to be unique within the placer's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.

- OBR-2.1 **Order Number** - The placer order number is expected to be unique within the placer's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.
 - OBR-2.2 **Assigning Authority Name** – The name of the Assigning Authority.
 - OBR-2.3 **Assigning Authority ID** – The OID of the Assigning Authority.
 - OBR-2.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- OBR-3 **Filler Order Number** – The order number of the person or entity that carries out the order. The filler order number is expected to be unique within the filler's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.
- OBR-3.1 **Order Number** - The filler order number is expected to be unique within the filler's organization. Order numbers which are reused should start with a timestamp to guarantee uniqueness.
 - OBR-3.2 **Assigning Authority Name** – The name of the Assigning Authority.
 - OBR-3.3 **Assigning Authority ID** – The OID of the Assigning Authority.
 - OBR-3.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- OBR-4 **Universal Service ID** – This field is the identifier code for the requested observation/test/battery. LOINC is recommended in OBR-4.1 – OBR-4.3. If LOINC is not available send localized codes in OBR-4.4 – OBR-4.6.
- OBR-4.1 **Code (LOINC)** – A LOINC code for the requested observation/test/battery.
 - OBR-4.2 **Description (LOINC)** – A description for the LOINC code sent in OBR-4.1.
 - OBR-4.3 **ID Type (LOINC)** – Identifies the type of code sent in OBR-4.1. CalREDIE expects 'LN' if OBR-4.1 and OBR-4.2 are populated.
 - OBR-4.4 **Alternate Code (Local)** – An alternate code the laboratory uses that uniquely identifies the requested observation/test/battery.
 - OBR-4.5 **Alternate Description (Local)** – A description for the local code sent in OBR-4.4.
 - OBR-4.6 **Alternate ID Type (Local)** – Identifies the type of code sent in OBR-4.4. CalREDIE expects 'L' if OBR-4.4 and OBR-4.5 are populated.

- OBR-4.7 **Coding System Version ID** – Version of the LOINC coding system used in OBR-4.1.
- OBR-4.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBR-4.4.
- OBR-4.9 **Original Text** – Not used.
- OBR-5 **Priority** – Not used.
- OBR-6 **Requested Date/Time** – Not used.
- OBR-7 **Observation Date/Time** – For specimen-based observations, the date/time the specimen was collected. If the SPM is sent, this field must contain the same value as the first component of SPM-17 Specimen Collection Date/Time. Time stamp (TS) data type must be in the format:
YYYYMMDD[HHMM[SS]]
- OBR-8 **Observation End Date/Time** – For specimen-based observations where the specimen was collected over a period of time, this represents the end point in time when the specimen was collected. This field must contain the same value as the second component of SPM-17 Specimen Collection Date/Time. Time stamp (TS) data type must be in the format:
YYYYMMDD[HHMM[SS]]
- OBR-9 **Collection Volume** – Deprecated, see SPM-12.
- OBR-10 **Collector Identifier** – Not used.
- OBR-11 **Specimen Action Code** – Not used.
- OBR-12 **Danger Code** – Not used.
- OBR-13 **Relevant Clinical Information** – Not used.
- OBR-14 **Specimen Received Date/Time** – Deprecated, see SPM-18.
- OBR-15 **Specimen Source** – Deprecated, see SPM-4.
- OBR-16 **Ordering Provider** – This field identifies the provider who ordered the test. CalREDIE expects to receive only a single name for the ordering provider. The legal name for the ordering provider is preferred.
- OBR-16.1 **ID number** – The identifier number for this provider. CalREDIE recommends sending the National Provider Identifier (NPI).

OBR-16.2 **Last Name** – The ordering provider's family/surname. Send the last name only in OBR-16.2. Do not send any other subcomponents of OBR-16.2.

OBR-16.3 **First Name** – The ordering provider's given name.

OBR-16.4 **Middle Name/Initials** – The ordering provider's middle name or initials thereof.

OBR-16.5 **Suffix** – The ordering provider's suffix (e.g. Jr, Sr, III etc)

OBR-16.6 **Prefix** – The ordering provider's prefix (e.g. DR)

OBR-16.7 **Degree** – See [HL7 table 360](#) for valid Degree codes.

OBR-16.8 **Source Table** – Not used.

OBR-16.9 **Assigning Authority** – The organization which assigned the ID number in ORC-12.1.

OBR-16.9.1 **Assigning Authority Name** – Always send 'CMS' in this subcomponent.

OBR-16.9.2 **Assigning Authority ID** – Always send '2.16.840.1.113883.19.4.6' in this subcomponent.

OBR-16.9.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

OBR-16.10 **Name Type Code** – See [HL7 table 200](#) for valid Name Type codes.

- 'L' (Legal Name) is recommended.

OBR-16.11 **Identifier Check Digit** – Not used.

OBR-16.12 **Check Digit Scheme** – Not used.

OBR-16.13 **Identifier Type Code** – Always send 'NPI' in this field.

OBR-16.14 **Assigning Facility** - Component used to identify the place/location that the ID number was assigned for use.

OBR-16.14.1 **Assigning Facility Name** – The name of the Assigning Facility.

OBR-16.14.2 **Assigning Facility ID** – The OID of the Assigning Facility.

OBR-16.14.3 **Assigning Facility ID Type** – Always send 'ISO' in this sub-component.

OBR-16.15 **Name Representation Code** – Not used.

OBR-16.16 **Name Context** – Not used.

OBR-16.17 **Name Validity Range** – Not used.

OBR-16.18 **Name Assembly Order** – Not used.

OBR-16.19 **Effective Date** – Not used.

OBR-16.20 **Expiration Date** – Not used.

OBR-16.21 **Professional Suffix** – The ordering provider's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

OBR-16.22 **Assigning Jurisdiction** – Not used.

OBR-16.23 **Assigning Agency or Department** – Not used.

OBR-17 **Order Callback Phone Number** – This is the number the laboratory can call with questions regarding the order. This is the number associated with the placer of the order. Note this field may have the same value as ORC-14.

OBR-17.1 **Phone Number** – Deprecated.

OBR-17.2 **Telecom Use Code** – See [HL7 table 201](#) for valid Telecom Use codes.

- Always send 'WPN' (Work Number) in this component.

OBR-17.3 **Telecom Equipment Type** – See [HL7 table 202](#) for valid Telecom Equipment Type codes.

- Always send 'PH' (Telephone) in this component.

OBR-17.4 **E-mail Address** – The ordering provider's e-mail address.

OBR-17.5 **Country Code** – Not used.

OBR-17.6 **Area Code** – The area code of the ordering provider's telephone number. CalREDIE expects 3 digits in this field.

OBR-17.7 **Phone Number** – The ordering provider's local telephone number. CalREDIE expects 7 digits in this field.

OBR-17.8 **Extension** – The ordering provider's extension.

OBR-17.9 **Any Text** – For example: "Regular hours 8AM – 5PM."

OBR-18 **Placer Field 1** – Not used.

OBR-19 **Placer Field 2** – Not used.

OBR-20 **Filler Field 1** – Not used.

OBR-21 **Filler Field 2** – Not used.

OBR-22 **Results Rpt/Status Change - Date/Time** – This field specifies the date/time when the results were reported or status changed.

This field is used to indicate the date and time that the results are composed into a report and released. Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

OBR-23 **Charge to Practice** – Not used.

OBR-24 **Diagnostic Service Section ID** – Not used.

OBR-25 **Result Status** – This field contains the status of results for this order. See [HL7 table 123](#) for valid Result Status codes.

OBR-26 **Parent Result** – This field allows the results associated with this order to be linked to a parent result. The value of this field is the organism or chemical species about which this battery reports. For example, if the current battery is an antimicrobial susceptibility, the parent OBX contains a result which identifies the organism on which the susceptibility was run. This field is required when linking sensitivities to an organism identified in a culture.

OBR-26.1 **OBX-3 Observation Identifier** – Populate based on values from parent OBX-3.

OBR-26.2 **OBX-4 Sub-ID** – Populate based on values from parent OBX-4.

OBR-26.3 **OBX-5 Observation Value** – Populate based on values from parent OBX-5.2 or OBX-5.5 if OBX-5.2 is null.

OBR-27 **Quantity/Timing** – Deprecated, see TQ1 and TQ2 segments.

OBR-28 **Result Copies To** – Not used.

OBR-29 **Parent** – Used to link this OBR with a parent OBR.

OBR-30 **Transportation Mode** – Not used.

OBR-31 **Reason for Study** – Not used.

OBR-32 Principal Result Interpreter – This field identifies the physician or other clinician who interpreted the observation and is responsible for the content of the report.

OBR-32.1 Name Component Only

OBR-32.1.1 **Identifier** – The identifier number for this physician or other clinician.

OBR-32.1.2 **Last Name** – The physician or other clinician's last name.

OBR-32.1.3 **First Name** – The physician or other clinician's first name.

OBR-32.1.4 **Middle Initial** – The physician or other clinician's middle initial.

OBR-32.1.5 **Suffix** – The physician or other clinician's suffix (e.g. Jr, Sr, III etc)

OBR-32.1.6 **Prefix** – The physician or other clinician's prefix (e.g. DR)

OBR-32.1.7 **Degree** – Not used.

OBR-32.1.8 **Name Type Code** – Defines the type of name sent in OBR-32. See [HL7 table 200](#) for valid Name Type codes.

OBR-32.1.9 **Assigning Authority Namespace ID** – The organization which assigned the ID number in OBR-32.1.1.

OBR-32.1.10 **Assigning Authority Universal ID** – The OID for the Organization listed in OBR-32.1.9.

OBR-32.1.11 **Assigning Authority Universal ID Type** – Always send 'ISO' in this sub-component.

OBR-33 Assistant Result Interpreter – Not used.

OBR-34 Technician – Not used.

OBR-35 Transcriptionist – Not used.

OBR-36 Scheduled Date/Time – Not used.

OBR-37 Number of Sample Containers – Deprecated, see SPM-26.

OBR-38 Transport Logistics of Collected Sample – Not used.

OBR-39 Collector's Comment – Not used.

OBR-40 Transport Arrangement Responsibility – Not used.

OBR-41 Transport Arranged – Not used.

OBR-42 Escort Required – Not used.

OBR-43 Planned Patient Transport Comment – Not used.

OBR-44 Procedure Code – Not used.

OBR-45 Procedure Code Modifier – Not used.

OBR-46 Placer Supplemental Service Information – Not used.

OBR-47 Filler Supplemental Service Information – Not used.

OBR-48 Medically Necessary Duplicate Procedure Reason – Not used.

OBR-49 Result Handling – Not used.

OBR-50 Parent Universal Service Identifier – Not used.

5.7 Observation/Result (OBX) Segment Comment

The OBX segment contains result information regarding a single observation. This includes identification of the specific type of observation, the result for the observation, when the observation was made, etc. CalREDIE requires at least one OBX segment per OBR.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	1	1..4	SI		Set ID - OBX	R	1
OBX	2	2..3	ID	125	Value Type	CE	CWE
OBX	3		CWE		Observation Identifier	R	
OBX	3.1	1..20	ST		Code (LOINC)	RE	625-4
OBX	3.2	1..199	ST		Description (LOINC)	CE	Bacteria identified:Prid:Pt:Stool:Nom:Culture
OBX	3.3	1..12	ST		ID Type (LOINC)	CE	LN
OBX	3.4	1..20	ST		Code (Local)	RE	STLCLT
OBX	3.5	1..199	ST		Description (Local)	CE	Stool Culture
OBX	3.6	1..12	ST		ID Type (Local)	CE	L
OBX	3.7	1..10	ST		Coding System Version ID	RE	2.26
OBX	3.8	1..10	ST		Alternate Coding System Version ID	RE	
OBX	3.9	1..10	ST		Original Text	CE	
OBX	3.10		ST		Second Alternate Identifier	O	
OBX	3.11		ST		Second Alternate Text	O	
OBX	3.12		ID		Second Name of Alternate Coding System	O	
OBX	3.13		ST		Second Alternate Coding System Version ID	O	
OBX	3.14		ST		Coding System OID	O	
OBX	3.15		ST		Value Set OID	X	
OBX	3.16		DTM		Value Set Version ID	X	
OBX	3.17		ST		Alternate Coding System OID	X	
OBX	3.18		ST		Alternate Value Set OID	X	
OBX	3.19		DTM		Alternate Value Set Version ID	X	
OBX	3.20		ST		Second Alternate Coding System OID	X	
OBX	3.21		ST		Second Alternate Value Set OID	X	
OBX	3.22		DTM		Second Alternate Value Set Version ID	X	
OBX	4	1..20	ST		Observation Sub-ID	CE	1

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	5		CWE		Observation Value	CE	
OBX	5.1	1..20	ST		Result Code (SNOMED)	RE	66543000
OBX	5.2	1..199	ST		Result Text (SNOMED)	CE	Campylobacter jejuni
OBX	5.3	1..12	ID		ID Type (SNOMED)	CE	SCT
OBX	5.4	1..20	ST		Alt. Result Code (Local)	RE	CPBJ
OBX	5.5	1..199	ST		Alt. Description (Local)	CE	Campylobacter jejuni
OBX	5.6	1..12	ID		Alt. ID Type (Local)	CE	L
OBX	5.7	1..10	ST		Coding System Version ID	RE	January 2007
OBX	5.8	1..10	ST		Alternate Coding System Version ID	RE	
OBX	5.9	1..10	ST		Original Text	CE	
OBX	5.10		ST		Second Alternate Identifier	O	
OBX	5.11		ST		Second Alternate Text	O	
OBX	5.12		ID		Second Name of Alternate Coding System	O	
OBX	5.13		ST		Second Alternate Coding System Version ID	O	
OBX	5.14		ST		Coding System OID	O	
OBX	5.15		ST		Value Set OID	X	
OBX	5.16		DTM		Value Set Version ID	X	
OBX	5.17		ST		Alternate Coding System OID	X	
OBX	5.18		ST		Alternate Value Set OID	X	
OBX	5.19		DTM		Alternate Value Set Version ID	X	
OBX	5.20		ST		Second Alternate Coding System OID	X	
OBX	5.21		ST		Second Alternate Value Set OID	X	
OBX	5.22		DTM		Second Alternate Value Set Version ID	X	
OBX	5		SN		Observation Value	CE	
OBX	5.1	1..2	ST		Comparator	RE	=
OBX	5.2		NM		Num1	RE	1
OBX	5.3	1..1	ST		Separator/Suffix	RE	:
OBX	5.4		NM		Num2	RE	2
OBX	5		ST TX		Observation Value	CE	Textual result
OBX	6		CWE		Units	CE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	6.1	1..20	ST		Identifier	RE	
OBX	6.2	1..199	ST		Text	CE	
OBX	6.3	1..12	ID		Name of Coding System	CE	
OBX	6.4	1..20	ST		Alternate Identifier	RE	
OBX	6.5	1..199	ST		Alternate Text	CE	
OBX	6.6	1..12	ID		Name of Alternate Coding System	CE	
OBX	6.7	1..10	ST		Coding System Version ID	RE	
OBX	6.8	1..10	ST		Alternate Coding System Version ID	RE	
OBX	6.9	1..10	ST		Original Text	CE	
OBX	6.10		ST		Second Alternate Identifier	O	
OBX	6.11		ST		Second Alternate Text	O	
OBX	6.12		ID		Second Name of Alternate Coding System	O	
OBX	6.13		ST		Second Alternate Coding System Version ID	O	
OBX	6.14		ST		Coding System OID	O	
OBX	6.15		ST		Value Set OID	X	
OBX	6.16		DTM		Value Set Version ID	X	
OBX	6.17		ST		Alternate Coding System OID	X	
OBX	6.18		ST		Alternate Value Set OID	X	
OBX	6.19		DTM		Alternate Value Set Version ID	X	
OBX	6.20		ST		Second Alternate Coding System OID	X	
OBX	6.21		ST		Second Alternate Value Set OID	X	
OBX	6.22		DTM		Second Alternate Value Set Version ID	X	
OBX	7	1..60	ST		Reference Ranges	RE	
OBX	8		CWE		Abnormal Flags	CE	
OBX	8.1	1..20	ST	78	Identifier	RE	
OBX	8.2	1..199	ST		Text	CE	
OBX	8.3	1..12	ID		Name of Coding System	CE	
OBX	8.4	1..20	ST		Alternate Identifier	RE	
OBX	8.5	1..199	ST		Alternate Text	CE	
OBX	8.6	1..12	ID		Name of Alternate Coding System	CE	
OBX	8.7	1..10	ST		Coding System Version ID	RE	
OBX	8.8	1..10	ST		Alternate Coding System Version ID	RE	
OBX	8.9	1..10	ST		Original Text	CE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	8.10		ST		Second Alternate Identifier	O	
OBX	8.11		ST		Second Alternate Text	O	
OBX	8.12		ID		Second Name of Alternate Coding System	O	
OBX	8.13		ST		Second Alternate Coding System Version ID	O	
OBX	8.14		ST		Coding System OID	O	
OBX	8.15		ST		Value Set OID	X	
OBX	8.16		DTM		Value Set Version ID	X	
OBX	8.17		ST		Alternate Coding System OID	X	
OBX	8.18		ST		Alternate Value Set OID	X	
OBX	8.19		DTM		Alternate Value Set Version ID	X	
OBX	8.20		ST		Second Alternate Coding System OID	X	
OBX	8.21		ST		Second Alternate Value Set OID	X	
OBX	8.22		DTM		Second Alternate Value Set Version ID	X	
OBX	9		NM		Probability	O	
OBX	10		ID	80	Nature of Abnormal Test	O	
OBX	11	1..1	ID	<u>85</u>	Observation Result Status	R	F
OBX	12		TS		Date Last Obs Normal Values	O	
OBX	13		ST		User Defined Access Checks	O	
OBX	14		TS		Date/Time of the Observation	CE	
OBX	14.1	8.14	DTM		Time	R	200906041458
OBX	14.2		ID		Degree of Precision	X	
OBX	15		CWE		Producer's ID	O	
OBX	16		XCN		Responsible Observer	O	
OBX	17		CWE		Observation Method	RE	
OBX	17.1	1..20	ST		Identifier	RE	
OBX	17.2	1..199	ST		Text	CE	
OBX	17.3	1..12	ID		Name of Coding System	CE	
OBX	17.4	1..20	ST		Alternate Identifier	RE	
OBX	17.5	1..199	ST		Alternate Text	CE	
OBX	17.6	1..12	ID		Name of Alternate Coding System	CE	
OBX	17.7	1..10	ST		Coding System Version ID	RE	
OBX	17.8	1..10	ST		Alternate Coding System Version ID	RE	
OBX	17.9	1..10	ST		Original Text	CE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	17.10		ST		Second Alternate Identifier	O	
OBX	17.11		ST		Second Alternate Text	O	
OBX	17.12		ID		Second Name of Alternate Coding System	O	
OBX	17.13		ST		Second Alternate Coding System Version ID	O	
OBX	17.14		ST		Coding System OID	O	
OBX	17.15		ST		Value Set OID	X	
OBX	17.16		DTM		Value Set Version ID	X	
OBX	17.17		ST		Alternate Coding System OID	X	
OBX	17.18		ST		Alternate Value Set OID	X	
OBX	17.19		DTM		Alternate Value Set Version ID	X	
OBX	17.20		ST		Second Alternate Coding System OID	X	
OBX	17.21		ST		Second Alternate Value Set OID	X	
OBX	17.22		DTM		Second Alternate Value Set Version ID	X	
OBX	18		EI		Equipment Instance Identifier	O	
OBX	19		TS		Date/Time of the Analysis	RE	
OBX	19.1	8..14	DTM		Time	R	200906051700
OBX	19.2		ID		Degree of Precision	X	
OBX	20		TBD		Reserved	X	
OBX	21		TBD		Reserved	X	
OBX	22		TBD		Reserved	X	
OBX	23		XON		Performing Organization Name	R	
OBX	23.1	1..50	ST		Organization Name	CE	Public Health Lab
OBX	23.2	1..20	IS	204	Organization Name Type Code	RE	L
OBX	23.3		NM		ID Number	X	
OBX	23.4		NM		Check Digit	O	
OBX	23.5		ID	61	Check Digit Scheme	O	
OBX	23.6		HD		Assigning Authority	CE	
OBX	23.6.1	1..20	IS		Assigning Authority Name	RE	CLIA
OBX	23.6.2	1..199	ST		Assigning Authority ID	R	2.16.840.1.113883.19.4.6
OBX	23.6.3	1..6	ID		Assigning Authority ID Type	R	ISO
OBX	23.7	2..5	ID	203	Identifier Type Code	CE	XX
OBX	23.8		HD		Assigning Facility	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	23.9		ID	465	Name Representation Code	O	
OBX	23.10	1..20	ST		Organization Identifier	RE	05D0909090
OBX	24		XAD		Performing Organization Address	R	
OBX	24.1		SAD		Ordering Provider Street Address	RE	
OBX	24.1.1	1..120	ST		Street Address	R	3434 Industrial Loop
OBX	24.1.2		ST		Street Name	O	
OBX	24.1.3		ST		Dwelling Number	O	
OBX	24.2	1..120	ST		Ordering Provider Other Designation	RE	
OBX	24.3	1..50	ST		Ordering Provider City	RE	Calabasas
OBX	24.4	1..50	ST		Ordering Provider State	RE	CA
OBX	24.5	1..12	ST		Ordering Provider Zip or Postal Code	RE	91302
OBX	24.6	3..3	ID		Country (Description)	RE	USA
OBX	24.7	1..3	ID	<u>190</u>	Address Type	RE	B
OBX	24.8		ST		Other geog. Designation	O	
OBX	24.9	1..20	IS		County	RE	
OBX	24.10		IS		Census tract	O	
OBX	24.11		ID		Address Representation Code	O	
OBX	24.12		DR		Address Validity Range	X	
OBX	24.13		TS		Effective Date	O	
OBX	24.14		TS		Expiration Date	O	
OBX	25		XCN		Performing Organization Medical Director	RE	
OBX	25.1	1..15	ST		Medical Director ID	RE	9876543
OBX	25.2		FN		Last Name	RE	
OBX	25.2.1	1..50	ST		Last Name	R	Slide
OBX	25.2.2		ST		Own Surname Prefix	O	
OBX	25.2.3		ST		Own Surname	O	
OBX	25.2.4		ST		Surname Prefix From Partner/Spouse	O	
OBX	25.2.5		ST		Surname From Partner/Spouse	O	
OBX	25.3	1..30	ST		First Name	RE	Stan
OBX	25.4	1..30	ST		Middle Name/Initial	RE	S
OBX	25.5	1..20	ST		Suffix	RE	
OBX	25.6	1..20	ST		Prefix	RE	
OBX	25.7		IS		Degree	O	
OBX	25.8		IS		Source Table	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
OBX	25.9		HD		Assigning Authority	CE	
OBX	25.9.1	1..20	IS		Namespace ID	RE	NPPES
OBX	25.9.2	1..199	ST		Universal ID	R	2.16.840.1.113883.19.4.6
OBX	25.9.3	1..6	ID		Universal ID Type	R	ISO
OBX	25.10	1..5	ID		Name Type Code	RE	L
OBX	25.11		ST		Identifier Check Digit	O	
OBX	25.12		ID		Check Digit Scheme	O	
OBX	25.13	2..5	ID		Identifier Type Code	CE	NPI
OBX	25.14		HD		Assigning Facility	RE	
OBX	25.14.1	1..20	IS		Namespace ID	RE	
OBX	25.14.2	1..199	ST		Universal ID	R	
OBX	25.14.3	1..6	ID		Universal ID Type	R	
OBX	25.15		ID		Name Representation Code	O	
OBX	25.16		CE		Name Context	O	
OBX	25.17		DR		Name Validity Range	X	
OBX	25.18		ID		Name Assembly Order	O	
OBX	25.19		TS		Effective Date	O	
OBX	25.20		TS		Expiration Date	O	
OBX	25.21	1..199	ST		Professional Suffix	RE	
OBX	25.22		CWE		Assigning Jurisdiction	O	
OBX	25.23		CWE		Assigning Agency or Department	O	

Example:

```
OBX|1|CWE|625-4^Bacteria identified:Prid:Pt:Stool:Nom:Culture^LN^STLCLT^Stool
Culture^L^2.26|1|66543000^Campylobacter jejuni^SCT^CPBJ^Campylobacter jejuni^L^January
2007|||||F|||200906041458|||||200906051700|||||Public Health
Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^^05D0909090|3434 Industrial
Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^^NPI
```

Element Descriptions:

- OBX-1 Set ID - OBX** – The first OBX segment under an OBR segment shall be populated with '1'. Subsequent OBX segments under the same parent OBR segment will increment the Set ID field.
- OBX-2 Value Type** – This field identifies the data type used for OBX-5. See [HL7 table 125](#) for valid Value Type codes.

OBX-3 Observation Identifier – This field contains a unique identifier for the observation.

- OBX-3.1 **Code (LOINC)** – A LOINC code for the observation.
 - OBX-3.2 **Description (LOINC)** – A description for the LOINC code sent in OBR-4.1.
 - OBX-3.3 **ID Type (LOINC)** – Identifies the type of code sent in OBR-4.1. CalREDIE expects 'LN' if OBR-4.1 and OBR-4.2 are populated.
 - OBX-3.4 **Alternate Code (Local)** – An alternate code the laboratory uses that uniquely identifies the observation.
 - OBX-3.5 **Alternate Description (Local)** – A description for the local code sent in OBR-4.4.
 - OBX-3.6 **Alternate ID Type (Local)** – Identifies the type of code sent in OBR-4.4. CalREDIE expects 'L' if OBR-4.4 and OBR-4.5 are populated.
 - OBX-3.7 **Coding System Version ID** – Version of the LOINC coding system used in OBR-4.1.
 - OBX-3.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBR-4.4.
 - OBX-3.9 **Original Text** – Not used.
- OBX-4 **Observation Sub-ID** – Used to uniquely identify a result code. Only needs to be sent if there are repeating OBX segments with equal OBX-3 fields. (OBX-3 and OBX-4 pairings should be unique per OBR.)
- OBX-5 **Observation Value** – This field contains the results of the test/observation listed in OBX-3. The structure of OBX-5 is defined by OBX-2.

TX/ST data types – used to carry a text/short text result value. Numeric results with or without units of measure should be reported as NM or SN (with units of measure in OBX-6).

SN data type – used to carry structured numeric result values including:

- **Intervals** – |^0^-^1| (between 0 and 1)
- **Ratios** – |^1/^2| or |^1^:^2| (ratio of 1 to 2)
- **Inequalities** – |<^10| (less than 10)

- **Categorical** – |^2^+|

Component breakdown:

OBX-5.1 **Comparator** – Must be one of ">" or "<" or ">=" or "<=" or "=" or "<>".

OBX-5.2 **Num1** – Numeric value.

OBX-5.3 **Separator/Suffix** – Must be one of "-" or "+" or "/" or "." or ":".

OBX-5.4 **Num2** – Numeric value.

CWE data type – used to carry coded results including:

- **Organisms** – |17872004^Neisseria meningitidis^SCT|
- **Modifiers** – |260373001^Detected^SCT|

Component breakdown:

OBX-5.1 **Result Code (SNOMED)** – A SNOMED CT code.

OBX-5.2 **Result Text (SNOMED)** – A description for the SNOMED CT code sent in OBX-5.1

OBX-5.3 **ID Type (SNOMED)** – Identifies the type of code sent in OBX-5.1 Always send 'SCT' (SNOMED CT) in this component when OBX-5.1 and OBX-5.2 are populated.

OBX-5.4 **Alt. Result Code (Local)** – An alternate code the laboratory uses that uniquely identifies the result.

OBX-5.5 **Alt. Description (Local)** – A description for the local code sent in OBX-5.5

OBX-5.6 **Alt. ID Type (Local)** – Identifies the type of code sent in OBX-5.4. Always send 'L' (Local) in this component when OBX-5.4 and OBX-5.5 are populated.

OBX-5.7 **Coding System Version ID** – Version of the SNOMED CT coding system used in OBX-5.1.

OBX-5.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBX-5.4.

OBX-5.9 **Original Text** – Not used.

OBX-6 Units – This field contains the units of measure for the observation value in OBX-5. If OBX-2 = "NM" or OBX-2 = "SN" then this field is required.

- OBX-6.1 **Identifier** – A Unified Code for Units of Measure (UCUM)
- OBX-6.2 **Text** – A description for the UCUM code sent in OBX-6.1.
- OBX-6.3 **Name of Coding System** – Identifies the type of code sent in OBX-6.1. Always send 'UCUM' (Unified Code for Units of Measure) in this component when OBX-6.1 and OBX-6.2 are populated.
- OBX-6.4 **Alternate Identifier** – An alternate code the laboratory uses that uniquely identifies the unit of measure.
- OBX-6.5 **Alternate Text** – A description for the local code sent in OBX-6.4.
- OBX-6.6 **Name of Alternate Coding System** – Identifies the type of code sent in OBX-6.4. Always send 'L' (Local) in this component when OBX-6.4 and OBX-6.5 are populated.
- OBX-6.7 **Coding System Version ID** – Version of the UCUM coding system used in OBX-6.7.
- OBX-6.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBX-6.4.
- OBX-6.9 **Original Text** – Not used.

OBX-7 Reference Ranges – When the observation quantifies the amount of a toxic substance, then the upper limit of the range identifies the toxic limit. If the observation quantifies a drug, the lower limits identify the lower therapeutic bounds and the upper limits represent the upper therapeutic bounds above which toxic side effects are common. Possible values include:
'3.5 – 4.5' lower limit – upper limit
'>10' lower limit
'<15' upper limit

OBX-8 Abnormal Flags – Indicates whether the result sent in OBX-5 is abnormal.

- OBX-8.1 **Identifier** – See [HL7 table 78](#) for valid Abnormal Flag codes.
- OBX-8.2 **Text** – A description for the abnormal code sent in OBX-8.1.
- OBX-8.3 **Name of Coding System** – Identifies the type of code sent in OBX-8.1. Always send 'HL70078' (User defined table 0078) in this component when OBX-8.1 and OBX-8.2 are populated.

- OBX-8.4 **Alternate Identifier** – An alternate code the laboratory uses that identifies the abnormality of the result.
- OBX-8.5 **Alternate Text** – A description for the local code sent in OBX-8.4.
- OBX-8.6 **Name of Alternate Coding System** – Identifies the type of code sent in OBX-8.4. Always send 'L' (Local) in this component when OBX-8.4 and OBX-8.5 are populated.
- OBX-8.7 **Coding System Version ID** – Always send '2.5.1' in OBX-8.7.
- OBX-8.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBX-8.4.
- OBX-8.9 **Original Text** – Not used.
- OBX-9 **Probability** – Not used.
- OBX-10 **Nature of Abnormal Test** – Not used.
- OBX-11 **Observation Result Status** – See [HL7 table 85](#) for valid Observation Result Status codes.
- OBX-12 **Date last Observed Normal Values** – Not used.
- OBX-13 **User Defined Access Checks** – Not used.
- OBX-14 **Date/Time of the Observation** – The clinically relevant time of the observation. For specimen-based laboratory reporting the specimen collected date and time. Time stamp (TS) data type must be in the format:
YYYYMMDD[HHMM[SS]]
- OBX-15 **Producer's ID** – Not used.
- OBX-16 **Responsible Observer** – Not used.
- OBX-17 **Observation Method** – Method of testing by the laboratory. If the LOINC code in OBX-3 does not indicate the observation method, this field shall be populated. The observation method can sometimes be extrapolated from the local test codes.
- OBX-17.1 **Identifier** – A code from the CDC value set: PHVS_LabTestMethods_CDC
- OBX-17.2 **Text** – A description for the code sent in OBX-17.1.
- OBX-17.3 **Name of Coding System** – Identifies the type of code sent in OBX-17.1. Always send 'CDCREC' (CDC Record Set) in this component when OBX-17.1 and OBX-17.2 are populated.
- OBX-17.4 **Alternate Identifier** – An alternate code the laboratory uses that uniquely identifies the observation method.

OBX-17.5 **Alternate Text** – A description for the local code sent in OBX-17.4.

OBX-17.6 **Name of Alternate Coding System** – Identifies the type of code sent in OBX-17.4. Always send 'L' (Local) in this component when OBX-17.4 and OBX-17.5 are populated.

OBX-17.7 **Coding System Version ID** – Version of the CDC value set coding system used in OBX-17.7.

OBX-17.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in OBX-17.4.

OBX-17.9 **Original Text** – Not used.

OBX-18 **Equipment Instance Identifier** – Not used.

OBX-19 **Date/Time of the Analysis** – Time at which the testing was performed. Time stamp (TS) data type must be in the format:
YYYYMMDD[HHMM[SS]]

OBX-20 **Reserved** – Not used.

OBX-21 **Reserved** – Not used.

OBX-22 **Reserved** – Not used.

OBX-23 **Performing Organization Name** – This field specifies the laboratory that produced the result described in this segment. For producing Laboratory's that are CLIA-certified, the CLIA identifier should be used for the organization identifier in component 10.

OBX-23.1 **Organization Name** – The name of the organization.

OBX-23.2 **Organization Name Type Code** – See [HL7 table 204](#) for valid Organization Name Type codes.

OBX-23.3 **ID Number** – Not used.

OBX-23.4 **Check Digit** – Not used.

OBX-23.5 **Check Digit Scheme** – Not used.

OBX-23.6 **Assigning Authority** – Used to identify the system, application, or organization that assigned the ID in OBX-23.10.

OBX-23.7 **Assigning Authority Name** – The name of the Assigning Authority.

OBX-23.8 **Assigning Authority ID** – The OID of the Assigning Authority.

OBX-23.9 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

OBX-23.10 **Identifier Type Code** – Always send 'XX' when OBX-23.10 is populated.

OBX-23.11 Assigning Facility – Not used.

OBX-23.12 Name Representation Code – Not used.

OBX-23.13 Organization Identifier – A code for the organization.

OBX-24 Performing Organization Address – Address of the laboratory that actually performed the test when used as a reference laboratory.

OBX-24.1 Street Address – The performing organization's street/mailing address. Send the street address only in OBX-24.1.1. Do not send any other subcomponents of OBX-24.1.

OBX-24.2 Address Line 2 – The performing organization's suite/unit number.

OBX-24.3 City – The performing organization's city.

OBX-24.4 State – The performing organization's state.

OBX-24.5 Zip or Postal Code – The performing organization's zip code.

OBX-24.6 Country – Not used.

OBX-24.7 Address Type – Defines the type of address sent in OBX-24. See [HL7 table 190](#) for valid Address Type codes. 'B' (Business) is recommended. If performing organization address is sent, this component is required.

OBX-24.8 Other Geographic Designation – Not used.

OBX-24.9 County – The performing organization's county.

OBX-25 Performing Organization Medical Director – Name of the Medical Director of the reference laboratory.

OBX-25.1 ID number – The identifier number for this provider. CalREDIE recommends sending the National Provider Identifier (NPI).

OBX-25.2 Last Name – The medical director's family/surname. Send the last name only in OBX-25.2. Do not send any other subcomponents of OBX-25.2.

OBX-25.3 First Name – The medical director's given name.

OBX-25.4 Middle Name/Initials – The medical director's middle name or initials thereof.

OBX-25.5 Suffix – The medical director's suffix (e.g. Jr, Sr, III etc)

OBX-25.6 Prefix – The medical director's prefix (e.g. DR)

OBX-25.7 **Degree** – Not used.

OBX-25.8 **Source Table** – Not used.

OBX-25.9 **Assigning Authority** – The organization which assigned the ID number in OBX-25.1.

OBX-25.9.1 **Assigning Authority Name** – Always send 'CMS' in this subcomponent.

OBX-25.9.2 **Assigning Authority ID** – Always send '2.16.840.1.113883.19.4.6' in this subcomponent.

OBX-25.9.3 **Assigning Authority ID Type** – Always send 'ISO' in this sub-component.

OBX-25.10 **Name Type Code** – See [HL7 table 200](#) for valid Name codes. 'L' is recommended.

OBX-25.11 **Identifier Check Digit** – Not used.

OBX-25.12 **Check Digit Scheme** – Not used.

OBX-25.13 **Identifier Type Code** – Always send 'NPI' in this field.

OBX-25.14 **Assigning Facility** - Component used to identify the place/location that the ID number was assigned for use.

OBX-25.14.1 **Assigning Facility Name** – The name of the Assigning Facility.

OBX-25.14.2 **Assigning Facility ID** – The OID of the Assigning Facility.

OBX-25.14.3 **Assigning Facility ID Type** – Always send 'ISO' in this sub-component.

OBX-25.15 **Name Representation Code** – Not used.

OBX-25.16 **Name Context** – Not used.

OBX-25.17 **Name Validity Range** – Not used.

OBX-25.18 **Name Assembly Order** – Not used.

OBX-25.19 **Effective Date** – Not used.

OBX-25.20 **Expiration Date** – Not used.

OBX-25.21 **Professional Suffix** – The medical director's professional suffix (e.g. MD). See [HL7 table 360](#) for valid Professional Suffix codes.

OBX-25.22 **Assigning Jurisdiction** – Not used.

OBX-25.23 **Assigning Agency or Department** – Not used.

5.8 Specimen (SPM) Segment Comment

The SPM segment describes the characteristics of a single sample. The SPM segment carries information regarding the type of specimen, where and how it was collected, who collected it, and some basic characteristics of the specimen. For CalREDIE messaging there should always be only one SPM segment per OBR.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	1	1..4	SI		Set ID - SPM	R	1
SPM	2		EIP		Specimen ID	R	
SPM	2.1		EIP		Placer-Assigned Identifier	O	
SPM	2.2		EIP		Filler-Assigned Identifier	R	
SPM	2.2.1	199	ST		Entity Identifier	R	9700122
SPM	2.2.2	20	IS		Namespace ID	RE	Public Health Lab
SPM	2.2.3	199	ST		Universal ID	R	2.16.840.1.113883.19.3.1.6
SPM	2.2.4	3	ID		Universal ID Type	R	ISO
SPM	3		EIP		Specimen Parent IDs	O	
SPM	4		CWE		Specimen Type	R	
SPM	4.1	1..20	ST	487	Identifier	RE	WB
SPM	4.2	1..199	ST		Text	CE	Whole Blood
SPM	4.3	1..12	ID		Name of Coding System	CE	HL70487
SPM	4.4	1..20	ST		Alternate Identifier	RE	
SPM	4.5	1..199	ST		Alternate Text	CE	
SPM	4.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	4.7	1..10	ST		Coding System Version ID	RE	2.5.1
SPM	4.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	4.9	1..10	ST		Original Text	CE	
SPM	4.10		ST		Second Alternate Identifier	O	
SPM	4.11		ST		Second Alternate Text	O	
SPM	4.12		ID		Second Name of Alternate Coding System	O	
SPM	4.13		ST		Second Alternate Coding System Version ID	O	
SPM	4.14		ST		Coding System OID	O	
SPM	4.15		ST		Value Set OID	X	
SPM	4.16		DTM		Value Set Version ID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	4.17		ST		Alternate Coding System OID	X	
SPM	4.18		ST		Alternate Value Set OID	X	
SPM	4.19		DTM		Alternate Value Set Version ID	X	
SPM	4.20		ST		Second Alternate Coding System OID	X	
SPM	4.21		ST		Second Alternate Value Set OID	X	
SPM	4.22		DTM		Second Alternate Value Set Version ID	X	
SPM	5		CWE		Specimen Type Modifier	RE	
SPM	5.1	1..20	ST	541	Identifier	RE	
SPM	5.2	1..199	ST		Text	CE	
SPM	5.3	1..12	ID		Name of Coding System	CE	
SPM	5.4	1..20	ST		Alternate Identifier	RE	
SPM	5.5	1..199	ST		Alternate Text	CE	
SPM	5.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	5.7	1..10	ST		Coding System Version ID	RE	
SPM	5.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	5.9	1..10	ST		Original Text	CE	
SPM	5.10		ST		Second Alternate Identifier	O	
SPM	5.11		ST		Second Alternate Text	O	
SPM	5.12		ID		Second Name of Alternate Coding System	O	
SPM	5.13		ST		Second Alternate Coding System Version ID	O	
SPM	5.14		ST		Coding System OID	O	
SPM	5.15		ST		Value Set OID	X	
SPM	5.16		DTM		Value Set Version ID	X	
SPM	5.17		ST		Alternate Coding System OID	X	
SPM	5.18		ST		Alternate Value Set OID	X	
SPM	5.19		DTM		Alternate Value Set Version ID	X	
SPM	5.20		ST		Second Alternate Coding System OID	X	
SPM	5.21		ST		Second Alternate Value Set OID	X	
SPM	5.22		DTM		Second Alternate Value Set Version ID	X	
SPM	6		CWE		Specimen Additives	RE	
SPM	6.1	1..20	ST	371	Identifier	RE	THYO
SPM	6.2	1..199	ST		Text	CE	Thyoglycollate broth
SPM	6.3	1..12	ID		Name of Coding System	CE	HL70371

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	6.4	1..20	ST		Alternate Identifier	RE	
SPM	6.5	1..199	ST		Alternate Text	CE	
SPM	6.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	6.7	1..10	ST		Coding System Version ID	RE	2.5.1
SPM	6.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	6.9	1..10	ST		Original Text	CE	
SPM	6.10		ST		Second Alternate Identifier	O	
SPM	6.11		ST		Second Alternate Text	O	
SPM	6.12		ID		Second Name of Alternate Coding System	O	
SPM	6.13		ST		Second Alternate Coding System Version ID	O	
SPM	6.14		ST		Coding System OID	O	
SPM	6.15		ST		Value Set OID	X	
SPM	6.16		DTM		Value Set Version ID	X	
SPM	6.17		ST		Alternate Coding System OID	X	
SPM	6.18		ST		Alternate Value Set OID	X	
SPM	6.19		DTM		Alternate Value Set Version ID	X	
SPM	6.20		ST		Second Alternate Coding System OID	X	
SPM	6.21		ST		Second Alternate Value Set OID	X	
SPM	6.22		DTM		Second Alternate Value Set Version ID	X	
SPM	7		CWE		Specimen Collection Method	RE	
SPM	7.1	1..20	ST	488	Identifier	RE	BCAE
SPM	7.2	1..199	ST		Text	CE	Blood Culture, Aerobic Bottle
SPM	7.3	1..12	ID		Name of Coding System	CE	HL70488
SPM	7.4	1..20	ST		Alternate Identifier	RE	
SPM	7.5	1..199	ST		Alternate Text	CE	
SPM	7.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	7.7	1..10	ST		Coding System Version ID	RE	2.5.1
SPM	7.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	7.9	1..10	ST		Original Text	CE	
SPM	7.10		ST		Second Alternate Identifier	O	
SPM	7.11		ST		Second Alternate Text	O	
SPM	7.12		ID		Second Name of Alternate Coding System	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	7.13		ST		Second Alternate Coding System Version ID	O	
SPM	7.14		ST		Coding System OID	O	
SPM	7.15		ST		Value Set OID	X	
SPM	7.16		DTM		Value Set Version ID	X	
SPM	7.17		ST		Alternate Coding System OID	X	
SPM	7.18		ST		Alternate Value Set OID	X	
SPM	7.19		DTM		Alternate Value Set Version ID	X	
SPM	7.20		ST		Second Alternate Coding System OID	X	
SPM	7.21		ST		Second Alternate Value Set OID	X	
SPM	7.22		DTM		Second Alternate Value Set Version ID	X	
SPM	8		CWE		Specimen Source Site	RE	
SPM	8.1	1..20	ST		Identifier	RE	49852007
SPM	8.2	1..199	ST		Text	CE	Structure of median cubital vein (body structure)
SPM	8.3	1..12	ID		Name of Coding System	CE	SCT
SPM	8.4	1..20	ST		Alternate Identifier	RE	
SPM	8.5	1..199	ST		Alternate Text	CE	
SPM	8.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	8.7	1..10	ST		Coding System Version ID	RE	20080131
SPM	8.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	8.9	1..10	ST		Original Text	CE	
SPM	8.10		ST		Second Alternate Identifier	O	
SPM	8.11		ST		Second Alternate Text	O	
SPM	8.12		ID		Second Name of Alternate Coding System	O	
SPM	8.13		ST		Second Alternate Coding System Version ID	O	
SPM	8.14		ST		Coding System OID	O	
SPM	8.15		ST		Value Set OID	X	
SPM	8.16		DTM		Value Set Version ID	X	
SPM	8.17		ST		Alternate Coding System OID	X	
SPM	8.18		ST		Alternate Value Set OID	X	
SPM	8.19		DTM		Alternate Value Set Version ID	X	
SPM	8.20		ST		Second Alternate Coding System OID	X	
SPM	8.21		ST		Second Alternate Value Set OID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	8.22		DTM		Second Alternate Value Set Version ID	X	
SPM	9		CWE		Specimen Source Site Modifier	RE	
SPM	9.1	1..20	ST	542	Identifier	RE	
SPM	9.2	1..199	ST		Text	CE	
SPM	9.3	1..12	ID		Name of Coding System	CE	
SPM	9.4	1..20	ST		Alternate Identifier	RE	
SPM	9.5	1..199	ST		Alternate Text	CE	
SPM	9.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	9.7	1..10	ST		Coding System Version ID	RE	
SPM	9.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	9.9	1..10	ST		Original Text	CE	
SPM	9.10		ST		Second Alternate Identifier	O	
SPM	9.11		ST		Second Alternate Text	O	
SPM	9.12		ID		Second Name of Alternate Coding System	O	
SPM	9.13		ST		Second Alternate Coding System Version ID	O	
SPM	9.14		ST		Coding System OID	O	
SPM	9.15		ST		Value Set OID	X	
SPM	9.16		DTM		Value Set Version ID	X	
SPM	9.17		ST		Alternate Coding System OID	X	
SPM	9.18		ST		Alternate Value Set OID	X	
SPM	9.19		DTM		Alternate Value Set Version ID	X	
SPM	9.20		ST		Second Alternate Coding System OID	X	
SPM	9.21		ST		Second Alternate Value Set OID	X	
SPM	9.22		DTM		Second Alternate Value Set Version ID	X	
SPM	10		CWE	543	Specimen Collection Site	O	
SPM	11		CWE		Specimen Role	RE	
SPM	11.1	1..20	ST	369	Identifier	RE	
SPM	11.2	1..199	ST		Text	CE	
SPM	11.3	1..12	ID		Name of Coding System	CE	
SPM	11.4	1..20	ST		Alternate Identifier	RE	
SPM	11.5	1..199	ST		Alternate Text	CE	
SPM	11.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	11.7	1..10	ST		Coding System Version ID	RE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	11.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	11.9	1..10	ST		Original Text	CE	
SPM	11.10		ST		Second Alternate Identifier	O	
SPM	11.11		ST		Second Alternate Text	O	
SPM	11.12		ID		Second Name of Alternate Coding System	O	
SPM	11.13		ST		Second Alternate Coding System Version ID	O	
SPM	11.14		ST		Coding System OID	O	
SPM	11.15		ST		Value Set OID	X	
SPM	11.16		DTM		Value Set Version ID	X	
SPM	11.17		ST		Alternate Coding System OID	X	
SPM	11.18		ST		Alternate Value Set OID	X	
SPM	11.19		DTM		Alternate Value Set Version ID	X	
SPM	11.20		ST		Second Alternate Coding System OID	X	
SPM	11.21		ST		Second Alternate Value Set OID	X	
SPM	11.22		DTM		Second Alternate Value Set Version ID	X	
SPM	12		CQ		Specimen Collection Amount	RE	
SPM	12.1		NM		Quantity	R	2.0
SPM	12.2		CWE		Units	RE	
SPM	12.2.1	1..20	ST		Identifier	RE	mL
SPM	12.2.2	1..199	ST		Text	CE	MilliLiter [SI Volume Units]
SPM	12.2.3	1..12	ID		Name of Coding System	CE	UCUM
SPM	12.2.4	1..20	ST		Alternate Identifier	RE	
SPM	12.2.5	1..199	ST		Alternate Text	CE	
SPM	12.2.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	12.2.7	1..10	ST		Coding System Version ID	RE	1.6
SPM	12.2.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	12.2.9	1..10	ST		Original Text	CE	
SPM	12.2.10		ST		Second Alternate Identifier	O	
SPM	12.2.11		ST		Second Alternate Text	O	
SPM	12.2.12		ID		Second Name of Alternate Coding System	O	
SPM	12.2.13		ST		Second Alternate Coding System Version ID	O	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	12.2.14		ST		Coding System OID	O	
SPM	12.2.15		ST		Value Set OID	X	
SPM	12.2.16		DTM		Value Set Version ID	X	
SPM	12.2.17		ST		Alternate Coding System OID	X	
SPM	12.2.18		ST		Alternate Value Set OID	X	
SPM	12.2.19		DTM		Alternate Value Set Version ID	X	
SPM	12.2.20		ST		Second Alternate Coding System OID	X	
SPM	12.2.21		ST		Second Alternate Value Set OID	X	
SPM	12.2.22		DTM		Second Alternate Value Set Version ID	X	
SPM	13		NM		Grouped Specimen Count	O	
SPM	14		ST		Specimen Description	O	
SPM	15		CWE	376	Specimen Handling Code	O	
SPM	16		CWE	489	Specimen Risk Code	O	
SPM	17		DR		Specimen Collection Date/Time	R	
SPM	17.1		TS		Range Start Date/Time	RE	
SPM	17.1.1	8..14	DTM		Time	R	
SPM	17.1.2		ID		Degree of Precision	X	
SPM	17.2		TS		Range End Date/Time	RE	
SPM	17.2.1	8..14	DTM		Time	R	
SPM	17.2.2		ID		Degree of Precision	X	
SPM	18		TS		Specimen Received Date/Time	R	
SPM	18.1	8..14	DTM		Time	R	201101151030
SPM	18.2		ID		Degree of Precision	X	
SPM	19		TS		Specimen Expiration Date/Time	O	
SPM	20		ID	136	Specimen Availability	O	
SPM	21		CWE		Specimen Reject Reason	RE	
SPM	21.1	1..20	ST	490	Identifier	RE	
SPM	21.2	1..199	ST		Text	CE	
SPM	21.3	1..12	ID		Name of Coding System	CE	
SPM	21.4	1..20	ST		Alternate Identifier	RE	
SPM	21.5	1..199	ST		Alternate Text	CE	
SPM	21.6	1..12	ID		Name of Alternate Coding System	CE	
SPM	21.7	1..10	ST		Coding System Version ID	RE	
SPM	21.8	1..10	ST		Alternate Coding System Version ID	RE	
SPM	21.9	1..10	ST		Original Text	CE	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
SPM	21.10		ST		Second Alternate Identifier	O	
SPM	21.11		ST		Second Alternate Text	O	
SPM	21.12		ID		Second Name of Alternate Coding System	O	
SPM	22.13		ST		Second Alternate Coding System Version ID	O	
SPM	22.14		ST		Coding System OID	O	
SPM	22.15		ST		Value Set OID	X	
SPM	22.16		DTM		Value Set Version ID	X	
SPM	22.17		ST		Alternate Coding System OID	X	
SPM	22.18		ST		Alternate Value Set OID	X	
SPM	22.19		DTM		Alternate Value Set Version ID	X	
SPM	22.20		ST		Second Alternate Coding System OID	X	
SPM	22.21		ST		Second Alternate Value Set OID	X	
SPM	22.22		DTM		Second Alternate Value Set Version ID	X	
SPM	22	CWE	491		Specimen Quality	O	
SPM	23	CWE	492		Specimen Appropriateness	O	
SPM	24	CWE	493		Specimen Condition	O	
SPM	25	CQ			Specimen Current Quantity	O	
SPM	26	NM			Number of Specimen Containers	O	
SPM	27	CWE			Container Type	O	
SPM	28	CWE	544		Container Condition	O	
SPM	29	CWE	494		Specimen Child Role	O	

Example:

```
SPM|1|^9700122&Public Health Lab&2.16.840.1.113883.19.3.1.6&ISO||WB^Whole
Blood^HL70487^^^2.5.1||THYO^Thyoglycollate broth^HL70371^^^2.5.1|BCAE^Blood Culture, Aerobic
Bottle^HL70488^^^2.5.1|49852007^Structure of median cubital vein (body
structure^SCT^^^20080131|||2.0^mL& MilliLiter [SI Volume Units]&UCUM&&&1.6|||||201101151030
```

Element Descriptions:

- SPM-1 **Set ID – SPM** – This field is set to '1' for the first child SPM segment under an OBR and increments by one for every subsequent SPM segment under the same parent OBR. CalREDIE expects only one SPM segment per OBR.
- SPM-1.1.1 Always send '1' in SPM-1.
- SPM-2 **Specimen ID** – A unique identifier for the specimen.
- SPM-2.1 **Placer Assigned Specimen ID** – Not used.
- SPM-2.2 **Filler Assigned Specimen ID** – A unique identifier for the specimen as assigned by the laboratory.
- SPM-2.2.1 **Specimen Identifier** – The accession number for the specimen. This should be unique within the laboratory. If accession numbers are ever reused it is recommended to start with a timestamp to the accession number to guarantee uniqueness.
- SPM-2.2.2 **Assigning Authority Name** – The name of the laboratory who assigned the accession number.
- SPM-2.2.3 **Assigning Authority ID** – The OID of the Assigning Authority.
- SPM-2.2.4 **Assigning Authority ID Type** – Always send 'ISO' in this component.
- SPM-3 **Specimen Parent ID's** – Not used.
- SPM-4 **Specimen Type** – Description of the precise nature of the entity that is the source material for the observation.
- SPM-4.1 **Identifier** – A code for the type of specimen. CalREDIE expects to receive values from [HL7 table 487](#) or [SNOMED CT Specimen sub-tree \(12303009\)](#).
- SPM-4.2 **Description** – A description for the type of specimen.
- SPM-4.3 **Name of Coding System** – Identifies the type of code sent in SPM-4.1. CalREDIE expects 'HL70487' for specimen types from the HL7 table 487, or 'SCT' for SNOMED CT specimen code.
- SPM-4.4 **Alternate Identifier** – A Laboratory's internal code for the type of specimen.
- SPM-4.5 **Alternate Description** – A Laboratory's internal description for the type of specimen.
- SPM-4.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-4.4. Always send 'L' in SPM-4.6.
- SPM-4.7 **Coding System Version ID** – Version of the coding system used in SPM-4.1.

- SPM-4.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-4.4.
- SPM-4.9 **Original Text** – Not used.
- SPM-5 **Specimen Type Modifier** – Field used with SPM-4 to further identify the type of specimen.
- SPM-5.1 **Identifier** – A code for the specimen type modifier. CalREDIE expects to receive values from the CDC value set [PHVS_ModifierOrQualifier_CDC](#) which is based on a subset of SNOMED CT.
- SPM-5.2 **Description** – A description for the specimen type modifier.
- SPM-5.3 **Name of Coding System** – Identifies the type of code sent in SPM-5.1. Always send 'SCT' in SPM-5.3.
- SPM-5.4 **Alternate Identifier** – A Laboratory's internal code for the specimen type modifier.
- SPM-5.5 **Alternate Description** – A Laboratory's internal description for the specimen type modifier.
- SPM-5.6 **Name of Alternate Coding System** – Not Used– Identifies the type of code sent in SPM-5.4. Always send 'L' in SPM-5.6.
- SPM-5.7 **Coding System Version ID** – Version of the coding system used in SPM-5.1.
- SPM-5.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-5.4.
- SPM-5.9 **Original Text** – Not used.
- SPM-6 **Specimen Additives** – Information regarding any substances added to the specimen before or at the time of specimen collection.
- SPM-6.1 **Identifier** – A code for the specimen additive. CalREDIE expects to receive values from [HL7 table 371](#).
- SPM-6.2 **Description** – A description for the specimen additive.
- SPM-6.3 **Name of Coding System** – Identifies the type of code sent in SPM-6.1. Always send 'HL70371' in SPM-6.3.
- SPM-6.4 **Alternate Identifier** – A Laboratory's internal code for the specimen additive.
- SPM-6.5 **Alternate Description** – A Laboratory's internal description for the specimen additive.
- SPM-6.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-6.4. Always send 'L' in SPM-6.6.
- SPM-6.7 **Coding System Version ID** – Version of the coding system used in SPM-6.1.

- SPM-6.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-6.4.
- SPM-6.9 **Original Text** – Not used.
- SPM-7 **Specimen Collection Method** – Method used to collect the specimen.
- SPM-7.1 **Identifier** – A code for the specimen collection method. CalREDIE expects to receive values from [HL7 table 488](#) or [SNOMED CT Specimen Collection sub-tree \(17636008\)](#).
- SPM-7.2 **Description** – A description for the specimen collection method.
- SPM-7.3 **Name of Coding System** – Identifies the type of code sent in SPM-7.1. CalREDIE expects 'HL70488' for specimen types from the HL7 table 487, or 'SCT' for SNOMED CT specimen code.
- SPM-7.4 **Alternate Identifier** – A Laboratory's internal code for the specimen collection method.
- SPM-7.5 **Alternate Description** – A Laboratory's internal description for the specimen collection method.
- SPM-7.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-7.4. Always send 'L' in SPM-7.6.
- SPM-7.7 **Coding System Version ID** – Version of the coding system used in SPM-7.1.
- SPM-7.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-7.4.
- SPM-7.9 **Original Text** – Not used.
- SPM-8 **Specimen Source Site** – Source from which the specimen was obtained. For biological samples it may represent the anatomical site from which the specimen was collected.
- SPM-8.1 **Identifier** – A code for the specimen source site. CalREDIE expects to receive values from [SNOMED CT Anatomical Structure \(91723000\)](#) hierarchy.
- SPM-8.2 **Description** – A description for the specimen source site.
- SPM-8.3 **Name of Coding System** – Identifies the type of code sent in SPM-8.1. Always send 'SCT' in SPM-8.3.
- SPM-8.4 **Alternate Identifier** – A Laboratory's internal code for the specimen source site.
- SPM-8.5 **Alternate Description** – A Laboratory's internal description for the specimen source site.
- SPM-8.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-8.4. Always send 'L' in SPM-8.6.

- SPM-8.7 **Coding System Version ID** – Version of the coding system used in SPM-8.1.
- SPM-8.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-8.4.
- SPM-8.9 **Original Text** – Not used.
- SPM-9 **Specimen Source Site Modifier** – Modifier or qualifier for the specimen source site (SPM-8).
- SPM-9.1 **Identifier** – A code for the specimen source site modifier. CalREDIE expects to receive values from the CDC value set [PHVS_ModifierOrQualifier_CDC](#) which is based on a subset of SNOMED CT.
- SPM-9.2 **Description** – A description for the specimen source site modifier.
- SPM-9.3 **Name of Coding System** – Identifies the type of code sent in SPM-9.1. Always send 'SCT' in SPM-9.3.
- SPM-9.4 **Alternate Identifier** – A Laboratory's internal code for the specimen source site modifier.
- SPM-9.5 **Alternate Description** – A Laboratory's internal description for the specimen source site modifier.
- SPM-9.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-9.4. Always send 'L' in SPM-9.6.
- SPM-9.7 **Coding System Version ID** – Version of the coding system used in SPM-9.1.
- SPM-9.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-9.4.
- SPM-9.9 **Original Text** – Not used.
- SPM-10 **Specimen Collection Site** – Approach site used to collect the specimen. For example, when collecting a specimen from an internal organ in the body, this field documents the location on the exterior of the body from which the specimen source site is approached.
- SPM-10.1 **Identifier** – A code for the specimen collection site. CalREDIE expects to receive values from [SNOMED CT Anatomical Structure \(91723000\)](#) hierarchy.
- SPM-10.2 **Description** – A description for the specimen collection site.
- SPM-10.3 **Name of Coding System** – Identifies the type of code sent in SPM-10.1. Always send 'SCT' in SPM-10.3.
- SPM-10.4 **Alternate Identifier** – A Laboratory's internal code for the specimen collection site.
- SPM-10.5 **Alternate Description** – A Laboratory's internal description for the specimen collection site.

SPM-10.6 **Name of Alternate Coding System** – Identifies the type of code sent in SPM-10.4. Always send 'L' in SPM-10.6.

SPM-10.7 **Coding System Version ID** – Version of the coding system used in SPM-10.1.

SPM-10.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in SPM-10.4.

SPM-10.9 **Original Text** – Not used.

SPM-11 **Specimen Role** – Not used.

SPM-12 **Specimen Collection Amount** – Amount of sample collected. This can be reported as a volume or a weight/mass.

SPM-12.1 **Quantity** – The quantity of the specimen collected.

SPM-12.2 **Units** – Units of measure.

SPM-13 **Grouped Specimen Count** – Not used.

SPM-14 **Specimen Description** – Additional information specifically about the specimen.

SPM-15 **Specimen Handling Code** – Not used.

SPM-16 **Specimen Risk Code** – Not used.

SPM-17 **Specimen Collection Date/Time** – Time range over which the sample was collected.

SPM-17.1 **Range Start Date/Time** – The time when specimen collection started. This value should match OBR-7 (Observation Date/Time). Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

SPM-17.2 **Range End Date/Time** – The time when specimen collection stopped. This value should match OBR-8 (Observation End Date/Time). Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

SPM-18 **Specimen Received Date/Time** – Time the specimen is received at the diagnostic service. The actual time that is recorded is based on how specimen receipt is managed, and may correspond to the time the sample is logged in. Time stamp (TS) data type must be in the format:

YYYYMMDD[HHMM[SS]]

SPM-19 **Specimen Expiration Date/Time** – Not used.

- SPM-20 **Specimen Availability** – Not used.
- SPM-21 **Specimen Reject Reason** – Not used.
- SPM-22 **Specimen Quality** – Not used.
- SPM-23 **Specimen Appropriateness** – Not used.
- SPM-24 **Specimen Condition** – Not used.
- SPM-25 **Specimen Current Quantity** – Not used.
- SPM-26 **Number of Specimen Containers** – Not used.
- SPM-27 **Container Type** – Not used.
- SPM-28 **Container Condition** – Not used.
- SPM-29 **Specimen Child Role** – Not used.

5.9 Notes and Comments (NTE) Segment Comment

The NTE segment is a common format for sending notes and comments. This optional, repeating segment may be inserted after any of the following segments in the ORU message:

- ORC
- OBR
- OBX

The comment in the NTE segment applies to the segment that immediately precedes it, e.g., an NTE segment following an OBX segment should contain a comment applicable to the observation reported in the preceding OBX segment.

This table reflects the implementation requirements specific to CalREDIE.

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NTE	1	1..4	SI		Set ID - NTE	R	1
NTE	2	1..1	ID	105	Source of Comment	RE	
NTE	3		FT		Comment	R	Comment goes here. It can be a very long comment.
NTE	4		CWE		Comment Type	RE	
NTE	4.1	1..20	ST	364	Identifier	RE	
NTE	4.2	1..199	ST		Text	CE	
NTE	4.3	1..12	ID		Name of Coding System	CE	
NTE	4.4	1..20	ST		Alternate Identifier	RE	
NTE	4.5	1..199	ST		Alternate Text	CE	
NTE	4.6	1..12	ID		Name of Alternate Coding System	CE	
NTE	4.7	1..10	ST		Coding System Version ID	RE	
NTE	4.8	1..10	ST		Alternate Coding System Version ID	RE	
NTE	4.9	1..10	ST		Original Text	CE	
NTE	4.10		ST		Second Alternate Identifier	O	
NTE	4.11		ST		Second Alternate Text	O	
NTE	4.12		ID		Second Name of Alternate Coding System	O	
NTE	4.13		ST		Second Alternate Coding System Version ID	O	
NTE	4.14		ST		Coding System OID	O	
NTE	4.15		ST		Value Set OID	X	
NTE	4.16		DTM		Value Set Version ID	X	
NTE	4.17		ST		Alternate Coding System OID	X	

SEG	SEQ	LEN	DT	TBL#	ELEMENT NAME	USE	EXAMPLE
NTE	4.18		ST		Alternate Value Set OID	X	
NTE	4.19		DTM		Alternate Value Set Version ID	X	
NTE	4.20		ST		Second Alternate Coding System OID	X	
NTE	4.21		ST		Second Alternate Value Set OID	X	
NTE	4.22		DTM		Second Alternate Value Set Version ID	X	

Example:

NTE|1||Comment goes here. It can be a very long comment.

Element Descriptions:

NTE-1 **Set ID - NTE** – The first child NTE segment shall be populated with '1'. Subsequent NTE segments under the same parent segment will increment the Set ID field.

NTE-2 **Source of Comment** – Identifies the source of the comment. See [HL7 table 105](#) for valid Source of Comment codes.

NTE-3 **Comment** – This field contains a comment for the parent segment.

NTE-4 **Comment Type** – Identifies the type of comment.

NTE-4.1 **Identifier** – See [HL7 table 364](#) for valid Comment Type codes.

NTE-4.2 **Text** – A description for the code sent in NTE-4.1.

NTE-4.3 **Name of Coding System** – Identifies the type of code sent in NTE-4.1. Always send 'HL70' (Comment Type) in this component when NTE-4.1 and NTE-4.2 are populated.

NTE-4.4 **Alternate Identifier** – An alternate code the laboratory uses that uniquely identifies the observation method.

NTE-4.5 **Alternate Text** – A description for the local code sent in NTE-4.4.

NTE-4.6 **Name of Alternate Coding System** – Identifies the type of code sent in NTE-4.4. Always send 'L' (Local) in this component when NTE-4.4 and NTE-4.5 are populated.

NTE-4.7 **Coding System Version ID** – Version of the HL7 table used in NTE-4.7. Always send '2.5.1' in this component when NTE-4.1 is populated.

NTE-4.8 **Alternate Coding System Version ID** – Version of the Laboratory's internal coding system used in NTE-4.4.

NTE-4.9 **Original Text** – Not used.

6. Testing Procedures and Certification Criteria Comment

Laboratories sending electronic lab results to CalREDIE will be required to perform several stages of testing prior to being certified for reporting live patient results to the production CalREDIE environment.

6.1 Initial Preparation and Analysis Comment

Prior to sending any files to CalREDIE, the sending laboratory will self-validate the message structure to conform to this message profile. CDPH will provide the CalREDIE HL7 Conformance Analysis Tool (7CAT), which the laboratory will use to analyze its HL7 message for structure and content. The laboratory will verify all required segments and fields are populated using the analysis tool. Minimally, the following message types should be analyzed internally by the laboratory:

- Antibody result with free text notes.
- PCR result with free text notes.
- Reference Lab results.
- Culture identifying a single organism.
- Culture identifying a single organism with colony counts and free text notes.
- Culture identifying multiple organisms with sensitivities.
- Culture identifying multiple organisms with sensitivities and free text notes.

Once a laboratory has finished making transformations to the messages to conform to the CalREDIE specification, the laboratory will generate an HL7 message for each of the examples above and paste the results into the CalREDIE 7CAT. The lab will save the results and return them to CDPH for independent analysis. No live patient data should be contained in the messages stored in the CalREDIE 7CAT sent to CDPH in this phase. Once a lab passes the initial analysis, the next stage of conformance analysis may begin.

6.2 Conformance Analysis Comment

At this stage of testing, an interface will be setup with the CalREDIE test environment. No live patient data will be used in this phase of testing. The message types listed above will be sent across the test interface and will be analyzed by CDPH for conformance.

6.3 Comprehensive Interface Testing Comment

Comprehensive interface testing involves sending an HL7 message for each reportable disease or condition. No live patient data will be used during this phase of testing. Once all reportable diseases and conditions have been verified, a new interface will be configured for the CalREDIE production environment containing live patient data.

6.4 Go Live Comment

At this stage the laboratory will be considered certified for production. The laboratory will send live patient data via the production interface. No fake, simulated, or mock data should be sent across the production interface.

7. Example Laboratory Result Messages Comment

This section lists some example HL7 messages for some specific lab results.

7.1 Antibody Result Comment

```
MSH|^~\&|Public Health App^2.16.840.1.113883.19.3.2^ISO|Public Health
Lab^05D0909090^CLIA|CalREDIE^2.16.840.1.113883.3.33.4.2.2^ISO|CDPH^2.16.840.1.113883.3.33.4.10.100^IS
O|201101011830||ORU^R01^ORU_R01|201101010001|P|2.5.1|||NE|NE|||||USELR1.0^^2.16.840.1.114222.4.10.3^I
SO

SFT|Atlas Development Corporation^L^^^^Health Level
Seven&2.16.840.1.113883&ISO^XX^^2.16.840.1.113883.3.33|10.5|CalREDIE|56734||20110317

PID|1||M0000010^^^Public Health Clinic&2.16.840.1.113883.19.3.2.1&ISO ^MR^Public Health Clinic of
LA&2.16.840.1.113883.19.3.2.1&ISO~444333333^^^US Social Security
Administration&2.16.840.1.113883.4.1&ISO^SS||Doe^John^Q^^^^L||19740814|M||W^White^HL70005^^^2.5.1|12
34 Anystreet Ave^Apt
101^Anytown^CA^90036^^H||^PRN^PH^John.Doe@test.com^1^805^5551234|^WPN^PH^^1^818^5551234^x1234|||||||
N^Not Hispanic or Latino^HL70189^^^2.5.1|||||||N

ORC|RE|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|||||||L43545^Craggie^Jessica^L^^Dr^^CMS&2.16.840.1.113883.19.4.
6&ISO^L^^^NPI^^^^^MD| |^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||||Public Health
Clinic|555 East Elk^^Calabasas^CA^92123^^B^^Los
Angeles|^WPN^PH^Public.Clinic@test.com^1^818^5551212|552 West Elk^Suite
123^Calabasas^CA^92123^^B^^Los Angeles

OBR|1|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|5198-7^HCV Ab Ser EIA-aCnc^LN^HCVAB^Hep C Virus
Ab^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^CMS&2.16.840.1.113883.19.4.6&ISO^L^^^
NPI^^^^^MD| |^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F

OBX|1|SN|5198-7^HCV Ab Ser EIA-aCnc^LN^HCVAB^Hep C Virus Ab^L^2.26|1>^11.0|s/co^Signal-to-Cutoff
ratio^UCUM^^^1.6|0.0-0.9|H|||F|||200808151030|||||200808181800|||||Public Health
Lab^L^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^^05D0909090|3434 Industrial
Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^^NPPEs&2.16.840.1.113883.19.4.6&ISO^L^^^NPI

SPM|1|^9700122&Public Health Lab&2.16.840.1.113883.19.3.1.6&ISO||WB^Whole
Blood^HL70487^BLD^Blood^L^20080731|| HEPA^Ammonium heparin^HL70371^AH^Ammonium Herapin^L^2.5.1|
```

VENIP^Venipuncture^HL70488^VP^Venopuncture^L^2.5.1|49852007^Structure of median cubital vein (body structure) ^SCT^VEIN^Vein^L^20080731|||2.0^mL&milliliter&UCUM&&&1.6|||||201101151030

7.2 Culture Identifying a Single Organism Comment

MSH|^~\&|Public Health App^2.16.840.1.113883.19.3.2^ISO|Public Health
Lab^05D0909090^CLIA|CalREDIE^2.16.840.1.113883.3.33.4.2.2^ISO|CDPH^2.16.840.1.113883.3.33.4.10.100^ISO|201101011830||ORU^R01^ORU_R01|201101010001|P|2.5.1|||NE|NE|||||USELR1.0^^2.16.840.1.114222.4.10.3^ISO

SFT|Atlas Development Corporation^L^^^^Health Level
Seven&2.16.840.1.113883&ISO^XX^^2.16.840.1.113883.3.33|10.5|CalREDIE|56734||20110317

PID|1||M0000010^^^Public Health Clinic&2.16.840.1.113883.19.3.2.1&ISO ^MR^Public Health Clinic of LA&2.16.840.1.113883.19.3.2.1&ISO~444333333^^^US Social Security Administration&2.16.840.1.113883.4.1&ISO^SS||Doe^John^Q^^^L||19740814|M||W^White^HL70005^^^2.5.1|1234 Anystreet Ave^Apt
101^Anytown^CA^90036^^H||^PRN^PH^John.Doe@test.com^1^805^5551234|^WPN^PH^^1^818^5551234^x1234|||||||N^Not Hispanic or Latino^HL70189^^^2.5.1|||||||N

ORC|RE|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO^L^^^NPI^^^^^^MD||^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||||Public Health Clinic|555 East Elk^^Calabasas^CA^92123^^B^^Los Angeles|^WPN^PH^Public.Clinic@test.com^1^818^5551212|552 West Elk^Suite 123^Calabasas^CA^92123^^B^^Los Angeles

OBR|1|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|625-4^Bacteria identified^LN^STLCLT^STOOL
CULTURE^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO ^L^^^NPI^^^^^^MD||^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F

OBX|1|CWE|625-4^Bacteria identified:Prid:Pt:Stool:Nom:Culture^LN^STLCLT^Stool
Culture^L^2.26|1|66543000^Campylobacter jejuni^SCT^CPBJ^Campylobacter jejuni^L^January 2007|||||F|||200906041458|||||200906051700|||||Public Health
Lab^L^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^^NPES&2.16.840.1.113883.19.4.6&ISO^L^^^NPI

SPM|1|^9700122&Public Health Lab&2.16.840.1.113883.19.3.1.6&ISO||STL^Stool
(Fecal)^HL70487^STL^Stool^L^20080731||CARY^Cary Blair Medium^HL70488^CBM^Cary Blair Medium^L^2.5.1|||||10^g&gram&UCUM&&&1.6|||||201101151030

7.3 Culture Identifying Multiple Organisms with Susceptibilities Comment

MSH|~~\&|Public Health App^2.16.840.1.113883.19.3.2^ISO|Public Health
Lab^05D0909090^CLIA|CalREDIE^2.16.840.1.113883.3.33.4.2.2^ISO|CDPH^2.16.840.1.113883.3.33.4.10.100^ISO|201101011830||ORU^R01^ORU_R01|201101010001|P|2.5.1|||NE|NE|||||USELR1.0^^2.16.840.1.114222.4.10.3^ISO

SFT|Atlas Development Corporation^L^^^^Health Level
Seven&2.16.840.1.113883&ISO^XX^^2.16.840.1.113883.3.33|10.5|CalREDIE|56734||20110317

PID|1||M0000010^^^Public Health Clinic&2.16.840.1.113883.19.3.2.1&ISO ^MR^Public Health Clinic of LA&2.16.840.1.113883.19.3.2.1&ISO~444333333^^^US Social Security Administration&2.16.840.1.113883.4.1&ISO^SS||Doe^John^Q^^^L||19740814|M||W^White^HL70005^^^2.5.1|1234 Anystreet Ave^Apt
101^Anytown^CA^90036^H||^PRN^PH^John.Doe@test.com^1^805^5551234|^WPN^PH^^1^818^5551234^x1234|||||||N^Not Hispanic or Latino^HL70189^^^2.5.1|||||||N

ORC|RE|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|||||||L43545^Craggie^Jessica^L^^Dr^^CMS&2.16.840.1.113883.19.4.6&ISO^L^^^NPI^^^^^MD| |^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||||Public Health Clinic|555 East Elk^^Calabasas^CA^92123^^B^^Los Angeles|^WPN^PH^Public.Clinic@test.com^1^818^5551212|552 West Elk^Suite 123^Calabasas^CA^92123^^B^^Los Angeles

OBR|1|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
Lab^2.16.840.1.113883.19.3.1.6^ISO|625-4^Bacteria identified^LN^STLCLT^STOOL
CULTURE^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^CMS&2.16.840.1.113883.19.4.6&ISO ^L^^^NPI^^^^^MD| |^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F

OBX|1|CWE|625-4^Bacteria identified:Prid:Pt:Stool:Nom:Culture^LN^STLCLT^Stool
Culture^L^2.26|1|66543000^Campylobacter jejuni^SCT^CPBJ^Campylobacter jejuni^L^January 2007|||||F|||200906041458|||||200906051700|||||Public Health
Lab^L^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^^NPI

OBX|2|SN|564-5^COLONY COUNT:NUM:PT:XXX:QN:VC^LN^COLCNT^Colony Count^L^2.26|1|^10000^-^90000|1^^UCUM^^^1.6|||||F|||200906041458|||||200906051700|||||Public Health
Lab^L^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^^NPI

OBX|3|CWE|625-4^Bacteria identified:Prid:Pt:Stool:Nom:Culture^LN^STLCLT^Stool
Culture^L^2.26|2|302620005^Salmonella group B phase 1 a-e^SCT^SalB1^Salmonella Group B^L^January 2007|||||F|||200906041458|||||200906051700|||||Public Health

Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBX|4|SN|564-5^COLONY COUNT:NUM:PT:XXX:QN:VC^LN^COLCNT^Colony
 Count^L^2.26|2|>^100000|1^^UCUM^^^^1.6|||||F|||200906041458|||||200906051700|||||Public Health
 Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

SPM|1|^9700122&Public Health Lab&2.16.840.1.113883.19.3.1.6&ISO||STL^Stool
 (Fecal)^HL70487^STL^Stool^L^20080731||CARY^Cary Blair Medium^HL70488^CBM^Cary Blair
 Medium^L^2.5.1|||||10^g&gram&UCUM&&&1.6|||||201101151030

OBR|2|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
 Lab^2.16.840.1.113883.19.3.1.6^ISO|50545-3^Bacterial susceptibility panel:-
 :Pt:Isolate:OrdQn:MIC^LN^MIC^Bacterial Susceptibility
 Panel^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO^L
 ^^^NPI^^^^^MD|^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F|625-4&Bacteria
 identified:Prid:Pt:Stool:Nom:Culture&LN&STLCLT&Stool Culture&L^1^Campylobacter jejuni

OBX|1|SN|6979-9^AMPICILLIN:SUSC:PT:ISLT:ORDQN:GRADIENT
 STRIP^LN^AMP^Ampicillin^L^2.26|1|<^0.06|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700|||||
 Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBX|2|SN|7016-9^GENTAMICIN:SUSC:PT:ISLT:ORDQN:GRADIENT
 STRIP^LN^GENT^Gentamicin^L^2.26|1|^0.05|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700|||||
 Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBX|3|SN|7002-9^CIPROFLOXACIN:SUSC:PT:ISLT:ORDQN:GRADIENT
 STRIP^LN^CPFX^Ciprofloxacin^L^2.26|1|^0.05|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700|||||
 Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBR|2|54654654^Public Health Clinic^2.16.840.1.113883.19.3.2.3^ISO|300005074^Public Health
 Lab^2.16.840.1.113883.19.3.1.6^ISO|50545-3^Bacterial susceptibility panel:-
 :Pt:Isolate:OrdQn:MIC^LN^MIC^Bacterial Susceptibility
 Panel^L^2.26|||200808151030|||||||L43545^Craggie^Jessica^L^^Dr^^^CMS&2.16.840.1.113883.19.4.6&ISO^L
 ^^^NPI^^^^^MD|^WPN^PH^Jessica.Craggie@test.com^1^818^5553434|||||2008081830|||F|625-4&Bacteria
 identified:Prid:Pt:Stool:Nom:Culture&LN&STLCLT&Stool Culture&L^2^Salmonella group B phase 1 a-e

OBX|1|SN|6979-9^AMPICILLIN:SUSC:PT:ISLT:ORDQN:GRADIENT
 STRIP^LN^AMP^Ampicillin^L^2.26|1|<^0.06|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700|||||
 Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
 Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBX|2|SN|7016-9^GENTAMICIN:SUSC:PT:ISLT:ORDQN:GRADIENT
STRIP^LN^GENT^Gentamicin^L^2.26|1|^0.05|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700||||
Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

OBX|3|SN|7002-9^CIPROFLOXACIN:SUSC:PT:ISLT:ORDQN:GRADIENT
STRIP^LN^CPFX^Ciprofloxacin^L^2.26|1|^0.05|ug/mL^^UCUM^^^^1.6||S|||F|||200906041458|||||200906051700||||
Public Health Lab^L^^^^CLIA&2.16.840.1.113883.19.4.6&ISO^XX^^05D0909090|3434 Industrial
Loop^^Calabasas^CA^91302^USA^B|9876543^Slide^Stan^S^^^^NPPES&2.16.840.1.113883.19.4.6&ISO^L^^NPI

8. Appendix (HL7 Value Sets) Comment

User-defined Table 0001 - Sex [values suggested by HL7] (use in [PID-8](#))

Value	Description
F	Female
M	Male
H	Hermaphrodite, Undetermined
T	Transsexual
O	Other
U	Unknown

User-defined Table 0002 – Marital Status (use in [PID-16](#))

Value	Description
A	Separated
D	Divorced
M	Married
S	Single
W	Widowed

User-defined Table 0005 - Race (use in [PID-10](#))

Value	Description
I	American Indian or Alaska Native
A	Asian
P	Native Hawaiian or Other Pacific Islander
B	Black or African-American
W	White
H	Hispanic or Latino
O	Other
U	Unknown

User-defined Table 0063 – Relationship (use in [NK1-3](#))

Value	Description
ASC	Associate
BRO	Brother
CGV	Care giver
CHD	Child
DEP	Handicapped dependent
DOM	Life partner
EMC	Emergency contact
EME	Employee
EMR	Employer
EXF	Extended family
FCH	Foster child
FND	Friend
FTH	Father
GCH	Grandchild
GRD	Guardian
GRP	Grandparent
MGR	Manager
MTH	Mother
NCH	Natural child
NON	None
OAD	Other adult
OTH	Other
OWN	Owner
PAR	Parent
SCH	Stepchild
SEL	Self
SIB	Sibling
SIS	Sister
SPO	Spouse
TRA	Trainer
UNK	Unknown
WRD	Ward of court

User-defined Table 0078 - Abnormal flags (use in [OBX-8](#))

Value	Description
L	Below low normal
H	Above high normal
LL	Below lower panic limits
HH	Above upper panic limits
<	Below absolute low-off instrument scale
>	Above absolute high-off instrument scale
N	Normal (applies to non-numeric results)
A	Abnormal (applies to non-numeric results)
AA	Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units)
null	No range defined, or normal ranges don't apply
U	Significant change up
D	Significant change down
B	Better--use when direction not relevant
W	Worse--use when direction not relevant
S	Susceptible*
R	Resistant*
I	Intermediate*
MS	Moderately susceptible*
VS	Very susceptible*

* For microbiology susceptibilities only

HL7-defined Table 0085 - Observation result status codes interpretation (use in [OBX-11](#))

Value	Description	CalREDIE
C	Record coming over is a correction and thus replaces a final result	Supported
D	Deletes the OBX record	Not Supported
F	Final results; Can only be changed with a corrected result	Supported
I	Specimen in lab; results pending	Not Supported
N	Not asked; used to affirmatively document that the observation identified in the OBX was not sought when the universal service ID in OBR-4 implies that it would be sought	Not Supported
O	Order detail description only (no result)	Not Supported
P	Preliminary results	Supported
R	Results entered - not verified	Supported
S	Partial results	Supported
X	Results cannot be obtained for this observation	Not Supported
U	Results status change to Final without re-transmitting results already sent as 'preliminary.'	Not Supported
W	Post original as wrong; e.g., transmitted for wrong patient	Not Supported

HL7-Defined Table 0105 – Source of Comment (use in [NTE-2](#))

Value	Description
L	Ancillary (filler) department is source of comment
O	Other system is source of comment
P	Orderer (placer) is source of comment

HL7- Defined Table 0123 – Result Status (use in [OBR-25](#))

Value	Description	CalREDIE Usage
O	Order received; specimen not yet received	Not supported
I	No results available; specimen received, procedure incomplete	Not supported
S	No results available; procedure scheduled, but not done	Not supported
A	Some, but not all, results available	Supported
P	Preliminary: A verified early result is available, final results not yet obtained	Supported
C	Correction to results	Supported
R	Results stored; not yet verified	Supported
F	Final results; results stored and verified. Can only be changed with a corrected result.	Supported
X	No results available; Order canceled.	Not supported
Y	No order on record for this test. (Used only on queries)	Not supported
Z	No record of this patient. (Used only on queries)	Not supported

HL7-defined Table 0125 – Value Type (use in [OBX-2](#))

Value	Description	CalREDIE
AD	Address	Not supported
CE	Coded Entry	Supported
CF	Coded Element With Formatted Values	Not supported
CK	Composite ID With Check Digit	Not supported
CN	Composite ID And Name	Not supported
CP	Composite Price	Not supported
CWE	Coded with Exceptions	Supported
CX	Extended Composite ID With Check Digit	Not supported
DT	Date	Supported
ED	Encapsulated Data	Not supported
FT	Formatted Text (Display)	Supported
MO	Money	Not supported
NM	Numeric	Supported
PN	Person Name	Not supported
RP	Reference Pointer	Supported
SN	Structured Numeric	Supported
ST	String Data	Supported
TM	Time	Supported
TN	Telephone Number	Not supported
TS	Time Stamp (Date & Time)	Supported
TX	Text Data (Display)	Supported
XAD	Extended Address	Not supported
XCN	Extended Composite Name And Number For Persons	Not supported
XON	Extended Composite Name And Number For Organizations	Not supported
XPN	Extended Person Name	Not supported
XTN	Extended Telecommunications Number	Not supported

HL7-defined Table 0155 – Acknowledgement Type (use in [MSH-15](#) and [MSH-16](#))

Value	Description
AL	Always
NE	Never
ER	Error/reject conditions only
SU	Successful completion only

User-defined Table 0189 - Ethnic Group (use in [PID-22](#))

Value	Description
H	Hispanic or Latino
N	not Hispanic or Latino
U	Unknown

HL7-defined Table 0190 - Address type (use in all XAD data types; including [PID-11](#))

Value	Description
C	Current or Temporary
P	Permanent
M	Mailing
B	Firm/Business
O	Office
H	Home
N	Birth (nee)
F	Country of Origin
L	Legal Address
BLD	Birth delivery location [use for birth facility]
BR	Residence at birth [use for residence at birth]
RH	Registry home
BA	Bad address

HL7-defined Table 0200 - Name type (use in all XCN, XPN data types; including [PID-5](#), [OBR-16](#))

Value	Description
A	Alias Name
L	Legal Name
D	Display Name
M	Maiden Name
C	Adopted Name
B	Name at Birth
P	Name of Partner/Spouse
I	Licensing Name
N	Nickname
R	Registered Name
S	Coded Pseudo-Name to ensure anonymity
T	Indigenous/Tribal/Community Name
U	Unspecified

HL7-defined Table 0201 – Telecommunication use code (use in all XTN data types, including [PID-13](#), [PID-14](#))

Value	Description
ASN	Answering Service Number
BPN	Beeper Number
EMR	Emergency Number
NET	Network (email) Address
ORN	Other Residence Number
PRN	Primary Residence Number
VHN	Vacation Home Number
WPN	Work Number

HL7-defined Table 0202 – Telecommunication equipment type (use in all XTN data types, including [PID-13](#), [PID-14](#))

Value	Description
BP	Beeper
CP	Cellular Phone
FX	Fax
Internet	Internet Address: Use Only If Telecommunication Use Code Is NET
MD	Modem
PH	Telephone
TDD	Telecommunications Device for the Deaf
TTY	Teletypewriter
X.400	X.400 email address: Use Only If Telecommunication Use Code Is NET

User-defined Table 0204 – Organizational Name Type (use in all XON data types, including [NK1-13](#), [ORC-21](#))

Value	Description
A	Alias name
D	Display name
L	Legal name
SL	Stock exchange listing name

User-defined Table 0360 - Degree (use in all XPN data types, including [PID-5](#), [OBR-16](#))

Value	Description
AA	Associate of Arts
AAS	Associate of Applied Science
ABA	Associate of Business Administration
AE	Associate of Engineering
AS	Associate of Science
BA	Bachelor of Arts
BBA	Bachelor of Business Administration
BE	Bachelor or Engineering
BFA	Bachelor of Fine Arts
BN	Bachelor of Nursing
BS	Bachelor of Science
BSL	Bachelor of Science - Law
BSN	Bachelor of Science in Nursing
BT	Bachelor of Theology
CANP	Certified Adult Nurse Practitioner
CER	Certificate
CMA	Certified Medical Assistant
CNM	Certified Nurse Midwife
CNP	Certified Nurse Practitioner
CNS	Certified Nurse Specialist
CPNP	Certified Pediatric Nurse Practitioner
CRN	Certified Registered Nurse
DBA	Doctor of Business Administration
DED	Doctor of Education
DIP	Diploma
DO	Doctor of Osteopathy
EMT	Emergency Medical Technician
EMTP	Emergency Medical Technician - Paramedic
FPNP	Family Practice Nurse Practitioner
HS	High School Graduate
JD	Juris Doctor
MA	Master of Arts
MBA	Master of Business Administration
MCE	Master of Civil Engineering
MD	Doctor of Medicine
MDA	Medical Assistant
MDI	Master of Divinity
ME	Master of Engineering
MED	Master of Education
MEE	Master of Electrical Engineering
MFA	Master of Fine Arts
MME	Master of Mechanical Engineering

Value	Description
MS	Master of Science
MSL	Master of Science - Law
MSN	Master of Science - Nursing
MT	Master of Theology
NG	Non-Graduate
NP	Nurse Practitioner
PA	Physician Assistant
PharmD	Doctor of Pharmacy
PHD	Doctor of Philosophy
PHN	Public Health Nurse
PHE	Doctor of Engineering
PHS	Doctor of Science
PN	Advanced Practice Nurse
RMA	Registered Medical Assistant
RPH	Registered Pharmacist
SEC	Secretarial Certificate
TS	Trade School Graduate

User Table 364 – Comment Type (Use in [NTE-4](#))

Value	Description
1R	Primary Reason
2R	Secondary Reason
AI	Ancillary Instructions
DR	Duplicate/Interaction Reason
GI	General Instructions
GR	General Reason
PI	Patient Instructions
RE	Remark

HL7 Table 371 – Specimen Additives (Use in [SPM-6](#))

Value	Description	Comment
F10	10% Formalin	Tissue preservative
C32	3.2% Citrate	Blue top tube
C38	3.8% Citrate	Blue top tube
HCL6	6N HCL	24 HR Urine Additive
ACDA	ACD Solution A	Yellow top tube
ACDB	ACD Solution B	Yellow top tube
ACET	Acetic Acid	Urine preservative
AMIES	Amies transport medium	Protozoa
HEPA	Ammonium heparin	Green top tube
BACTM	Bacterial Transport medium	Microbiological culture

Value	Description	Comment
BOR	Borate Boric Acid	24HR Urine Additive
BOUIN	Bouin's solution	Tissue
BF10	Buffered 10% formalin	Tissue
WEST	Buffered Citrate (Westergren Sedimentation Rate)	Black top tube
BSKM	Buffered skim milk	Viral isolation
CARS	Carson's Modified 10% formalin	Tissue
CARY	Cary Blair Medium	Stool Cultures
CHLTM	Chlamydia transport medium	Chlamydia culture
CTAD	CTAD (this should be spelled out if not universally understood)	Blue top tube
ENT	Enteric bacteria transport medium	Bacterial culture
ENT+	Enteric plus	Stool Cultures
JKM	Jones Kendrick Medium	Bordetella pertussis
KARN	Karnovsky's fixative	Tissue
LIA	Lithium iodoacetate	Gray top tube
HEPL	Lithium/Li Heparin	Green top tube
M4	M4	Microbiological culture
M4RT	M4-RT	Microbiological culture
M5	M5	Microbiological culture
MICHTM	Michel's transport medium	IF tests
MMDTM	MMD transport medium	Immunofluorescence
HNO3	Nitric Acid	Urine
NONE	None	Red or Pink top tube
PAGE	Pages's Saline	Acanthaoemba
PHENOL	Phenol	24 Hr Urine Additive
KOX	Potassium Oxalate	Gray top tube
EDTK	Potassium/K EDTA	Deprecated. Replaced by EDTK15 and EDTK75
EDTK15	Potassium/K EDTA 15%	Purple top tube
EDTK75	Potassium/K EDTA 7.5%	Purple top tube
PVA	PVA (polyvinylalcohol)	O&P
RLM	Reagan Lowe Medium	Bordetella pertussis cultures
SST	Serum Separator Tube (Polymer Gel)	'Tiger' Top tube
SILICA	Siliceous earth, 12 mg	Gray top tube
NAF	Sodium Fluoride	Gray top tube
FL100	Sodium Fluoride, 100mg	Urine
FL10	Sodium Fluoride, 10mg	Urine
NAPS	Sodium polyanethol sulfonate 0.35% in 0.85% sodium chloride	Yellow (Blood Culture)
HEPN	Sodium/Na Heparin	Green top tube

Value	Description	Comment
EDTN	Sodium/Na EDTA	Dark Blue top tube
SPS	SPS(this should be spelled out if not universally understood)	Anticoagulant w/o bacteriocidal properties
STUTM	Stuart transport medium	Bacterial culture
THROM	Thrombin	Orange or Grey/Yellow (STAT Chem)
FDP	Thrombin NIH; soybean trypsin inhibitor (Fibrin Degradation Products)	Dark Blue top tube
THYMOL	Thymol	24 Hr Urine Additive
THYO	Thyoglycollate broth	Bacterial Isolation
TOLU	Toluene	24 Hr Urine Additive
URETM	Ureaplasma transport medium	Ureaplasma culture
VIRTM	Viral Transport medium	Virus cultures

HL7 Table 487 – Specimen Type (Use in [SPM-4](#))

Value	Description	Comment
ABS	Abscess	
PELVA	Abscess, Pelvic	Condition
PERIA	Abscess, Perianal	Condition, Abcess & Body Part
RECTA	Abscess, Rectal	Condition
SCROA	Abscess, Scrotal	Condition
SUBMA	Abscess, Submandibular	Condition
SUBMX	Abscess, Submaxillary	Condition
TSTES	Abscess, Testicular	Condition
AIRS	Air Sample	Environment
ALL	Allograft	Tissue
AMP	Amputation	Tissue
GASAN	Antrum, Gastric	Tissue
ASP	Aspirate	
ETA	Aspirate, Endotrach	Aspirate
GASA	Aspirate, Gastric	Aspirate
NGASP	Aspirate, Nasogastric	Aspirate
TASP	Aspirate, Tracheal	Aspirate
TTRA	Aspirate, Transtracheal	Aspirate
AUTP	Autopsy	Tissue
BX	Biopsy	Tissue
GSPEC	Biopsy, Gastric	Tissue
SKBP	Biopsy, Skin	Tissue
CONE	Biospy, Cone	Tissue
BITE	Bite	Conditions
CBITE	Bite, Cat	Conditions
DBITE	Bite, Dog	Conditions
HBITE	Bite, Human	Conditions

Value	Description	Comment
IBITE	Bite, Insect	Conditions
RBSITE	Bite, Reptile	Conditions
BLEB	Bleb	Condition, Fluid/Tissue
BLIST	Blister	Condition, Fluid/Tissue
BBL	Blood bag	Blood
BPU	Blood product unit	Blood
HBLUD	Blood, Autopsy	Blood
CSVR	Blood, Cell Saver	Transfusion
FBLOOD	Blood, Fetal	Blood
MBLD	Blood, Menstrual	Blood
WB	Blood, Whole	Blood
BOIL	Boil	Condition
BON	Bone	
BOWL	Bowel contents	Condition
BRTH	Breath (use EXHLD)	
BRSH	Brush	Product; Brush or brushing (these may be 2)
EBRUSH	Brush, Esophageal	Product
BRUS	Brushing	Product
GASBR	Brushing, Gastric	Product
BUB	Bubo	Condition
BULLA	Bulla/Bullae	Condition
BRN	Burn	
CALC	Calculus (=Stone)	
CARBU	Carbuncle	Condition
CAT	Catheter	Device
CSITE	Catheter Insertion Site	Device
CTP	Catheter tip	Device
ANGI	Catheter Tip, Angio	Device
ARTC	Catheter Tip, Arterial	Device
CVPT	Catheter Tip, CVP	Device
ETTP	Catheter Tip, Endotracheal	Device
FOLEY	Catheter Tip, Foley	Device
HEMAQ	Catheter Tip, Hemaquit	Device
HEMO	Catheter Tip, Hemovac	Device
IDC	Catheter Tip, Indwelling	Device
INTRD	Catheter Tip, Introducer	Device
IVCAT	Catheter Tip, IV	Device
MAHUR	Catheter Tip, Makurkour	Device
SCLV	Catheter Tip, Subclavian	Device
SPRP	Catheter Tip, Suprapubic	Device
SWGZ	Catheter Tip, Swan Gantz	Device
VASTIP	Catheter Tip, Vas	Device
VENT	Catheter Tip, Ventricular	Device

Value	Description	Comment
GROSH	Catheter, Groshong	Device
HIC	Catheter, Hickman	Device
PORTA	Catheter, Porta	Device
SPRPB	Cathether Tip, Suprapubic	Device
TLC	Cathether Tip, Triple Lumen	Device
CLIPP	Clippings	Condition
COL	Colostrum	
CNJT	Conjunctiva	
LENS1	Contact Lens	Device
LENS2	Contact Lens Case	Device
CYST	Cyst	
BCYST	Cyst, Baker's	Condition
ICYST	Cyst, Inclusion	Condition
PILOC	Cyst, Pilonidal	Condition
RENALC	Cyst, Renal	Condition
DIA	Dialysate	Condition
DISCHG	Discharge	Condition
DIV	Diverticulum	Condition
DRN	Drain	
DRN	Drain	Device
HEV	Drain, Hemovac	Device
GTUBE	Drainage Tube, Drainage (Gastrostomy)	Condition
GASD	Drainage, Gastric	Condition
ILEO	Drainage, Ileostomy	Condition
JP	Drainage, Jackson Pratt	Condition
JEJU	Drainage, Jejunal	Condition
NASDR	Drainage, Nasal	Condition
NGAST	Drainage, Nasogastric	Condition
PND	Drainage, Penile	Condition
DRNGP	Drainage, Penrose	Condition
RECT	Drainage, Rectal	Condition
SUMP	Drainage, Sump	Condition
DRNG	Drainage, Tube	Device
EARW	Ear wax (cerumen)	
EFFUS	Effusion	Condition
ELT	Electrode	
AUTOC	Environment, Attest	Environment
ATTE	Environmental, Autoclave Ampule	Environment
AUTOC	Environmental, Autoclave Capsule	Environment
EFF	Environmental, Effluent	Environment
EEYE	Environmental, Eye Wash	Environment
EFOD	Environmental, Food	Environment
EISO	Environmental, Isolette	Environment

Value	Description	Comment
EOTH	Environmental, Other Substance	Environment; (Substance is Known but not in code
ESOI	Environmental, Soil	Environment
ESOS	Environmental, Solution (Sterile)	Environment
SPS	Environmental, Spore Strip	Environment
STER	Environmental, Sterrad	Environment
ENVIR	Environmental, Unidentified Substance	Environment
WWA	Environmental, Water	Environment
DEION	Environmental, Water (Deionized)	Environment
WWT	Environmental, Water (Tap)	Environment
FAW	Environmental, Water (Well)	Environment
WWO	Environmental, Water (Ocean)	
EWHI	Environmental, Whirlpool	Environment
EXUDTE	Exudate	Condition
FLT	Filter	
FIST	Fistula	
FLUID	Fluid	Fluid
FGA	Fluid, Abdomen	Fluid
CSMY	Fluid, Cystostomy Tube	Fluid
ACNFLD	Fluid, Acne	Fluid
FLU	Fluid, Body unsp	
CST	Fluid, Cyst	Fluid
HYDC	Fluid, Hydrocele	Fluid
IVFLD	Fluid, IV	Fluid
JNTFLD	Fluid, Joint	Fluid
KIDFLD	Fluid, Kidney	Fluid
LSAC	Fluid, Lumbar Sac	Fluid
FLD	Fluid, Other	Fluid
PCFL	Fluid, Pericardial	
RENC	Fluid, Renal Cyst	Fluid
FRS	Fluid, Respiratory	Fluid
SHUNF	Fluid, Shunt	Fluid
SNV	Fluid, synovial (Joint fluid)	
GAST	Fluid/contents, Gastric	
FUR	Furuncle	Condition
GAS	Gas	
EXG	Gas, exhaled (=breath)	
IHG	Gas, Inhaled	
GENV	Genital vaginal	
GRAFT	Graft	Condition
GRAFT	Graft Site	Condition
POPGS	Graft Site, Popliteal	Condition
POPLG	Graft, Popliteal	Condition
GRANU	Granuloma	Condition

Value	Description	Comment
IMP	Implant	Device
INFIL	Infiltrate	Condition
INS	Insect	Object
IUD	Intrauterine Device	Device (Common Usage)
IT	Intubation tube	
KELOI	Lavage	Product
LAVG	Lavage, Bronhial	Product
LAVGG	Lavage, Gastric	Product
LAVGP	Lavage, Peritoneal	Product
LAVPG	Lavage, Pre-Bronch	Product
LESN	Lesion	Condition
ORL	Lesion, Oral	Condition (Common Usage)
PENIL	Lesion, Penile	Condition (Common Usage)
LIQO	Liquid, Other	
LIQ	Liquid, Unspecified	
MASS	Mass	Condition
SMM	Mass, Sub-Mandibular	Condition
MUCOS	Mucosa	Condition
MUCUS	Mucus	Condition
NEDL	Needle	Device
NODUL	Nodule(s)	Condition
CYN	Nodule, Cystic	Condition
ORH	Other	
PACEM	Pacemaker	Device
PLAN	Plant Material	Object
PLAS	Plasma	Blood
PLB	Plasma bag	Blood
PPP	Plasma, Platelet poor	Blood
PRP	Plasma, Platelet rich	Blood
POL	Polyps	Condition
PROST	Prosthetic Device	Device
PSC	Pseudocyst	Condition
PUS	Pus	
PUST	Pus	Condition
PUSFR	Pustule	Condition
QC3	Quality Control	Environment
RES	Respiratory	Condition (Ambiguous)
SAL	Saliva	
FSCLP	Scalp, Fetal	Condition
CSCR	Scratch, Cat	Condition
SECRE	Secretion(s)	Fluid/Secretion
NSECR	Secretion, Nasal	Condition
SER	Serum	

Value	Description	Comment
ASERU	Serum, Acute	Blood
CSERU	Serum, Convalescent	Blood
PLEVS	Serum, Peak Level	Blood
TSERU	Serum, Trough	Blood
SHUNT	Shunt	Condition
EXS	Shunt, External	Condition
SITE	Site	Site
CVPS	Site, CVP	Site
INCI	Site, Incision/Surgical	Site
NGS	Site, Naso/Gastric	Site
NEPH	Site, Nephrostomy	Site
PIS	Site, Pacemaker Insetion	Site
PDSIT	Site, Peritoneal Dialysis	Site
PDTS	Site, Peritoneal Dialysis Tunnel	Site
PINS	Site, Pin	Site
POPLV	Site, Popliteal Vein	Site
SHU	Site, Shunt	Site
TRAC	Site, Tracheostomy	Site
SKN	Skin	
TZANC	Smear, Tzanck	
GSOL	Solution, Gastrostomy	Product
ILLEG	Source of Specimen Is Illegible	
OTH	Source, Other	
UDENT	Source, Unidentified	
USPEC	Source, Unspecified	
SPRM	Spermatozoa	
SPT	Sputum	
SPTC	Sputum - coughed	
SPTT	Sputum - tracheal aspirate	
DCS	Sputum, Deep Cough	Condition
SPUTIN	Sputum, Inducted	Condition
SPUT1	Sputum, Simulated	Condition
SPUTSP	Sputum, Spontaneous	Condition
STONE	Stone, Kidney	Condition
STL	Stool = Fecal	
SUP	Suprapubic Tap	Product
SUTUR	Suture	Object
TISS	Tissue	
TISU	Tissue ulcer	
ACNE	Tissue, Acne	Tissue
HERNI	Tissue, Herniated	Tissue
SCAR	Tissue, Keloid (Scar)	Tissue
TRANS	Transudate	Condition

Value	Description	Comment
ETTUB	Tube, Endotracheal	Device
GT	Tube, Gastric	Device
TUBES	Tubes	Device
IVTIP	Tubing Tip, IV	Device
TUMOR	Tumor	Condition
DEC	Ulcer, Decubitus	Condition
UR	Urine	
URT	Urine catheter	
URC	Urine clean catch	
URINB	Urine, Bladder Washings	Condition
URINC	Urine, Catheterized	Condition
USCOP	Urine, Cystoscopy	Condition
URINM	Urine, Midstream	Condition
URINN	Urine, Nephrostomy	Condition
URINP	Urine, Pedibag	Device
RANDU	Urine, Random	Condition
VITF	Vitreous Fluid	
VOM	Vomitus	
WRT	Wart	Tissue
WASH	Wash	Product
WASI	Washing, e.g. bronchial washing	Product
WAT	Water	
WEN	Wen	Tissue
WICK	Wick	
WORM	Worm	Object
WND	Wound	
WNDA	Wound abscess	
WNDD	Wound drainage	
WNDE	Wound exudate	
PUNCT	Wound, Puncture	Condition

HL7 Table 488 – Specimen Collection Method (Use in [SPM-7](#))

Value	Description
FNA	Aspiration, Fine Needle
PNA	Aterial puncture
BIO	Biopsy
BCAE	Blood Culture, Aerobic Bottle
BCAN	Blood Culture, Anaerobic Bottle
BCPD	Blood Culture, Pediatric Bottle
CAP	Capillary Specimen
CATH	Catheterized
EPLA	Environmental, Plate

ESWA	Environmental, Swab
LNA	Line, Arterial
CVP	Line, CVP
LNV	Line, Venous
MARTL	Martin-Lewis Agar
ML11	Mod. Martin-Lewis Agar
PACE	Pace, Gen-Probe
PIN	Pinworm Prep
KOFFP	Plate, Cough
MLP	Plate, Martin-Lewis
NYP	Plate, New York City
TMP	Plate, Thayer-Martin
ANP	Plates, Anaerobic
BAP	Plates, Blood Agar
PRIME	Pump Prime
PUMP	Pump Specimen
QC5	Quality Control For Micro
SCLP	Scalp, Fetal Vein
SCRAPS	Scrapings
SHA	Shaving
SWA	Swab
SWD	Swab, Dacron tipped
WOOD	Swab, Wooden Shaft
TMOT	Transport Media,
TMAN	Transport Media, Anaerobic
TMCH	Transport Media, Chlamydia
TMM4	Transport Media, M4
TMMY	Transport Media, Mycoplasma
TMPV	Transport Media, PVA
TMSC	Transport Media, Stool Culture
TMUP	Transport Media, Ureaplasma
TMVI	Transport Media, Viral
VENIP	Venipuncture